

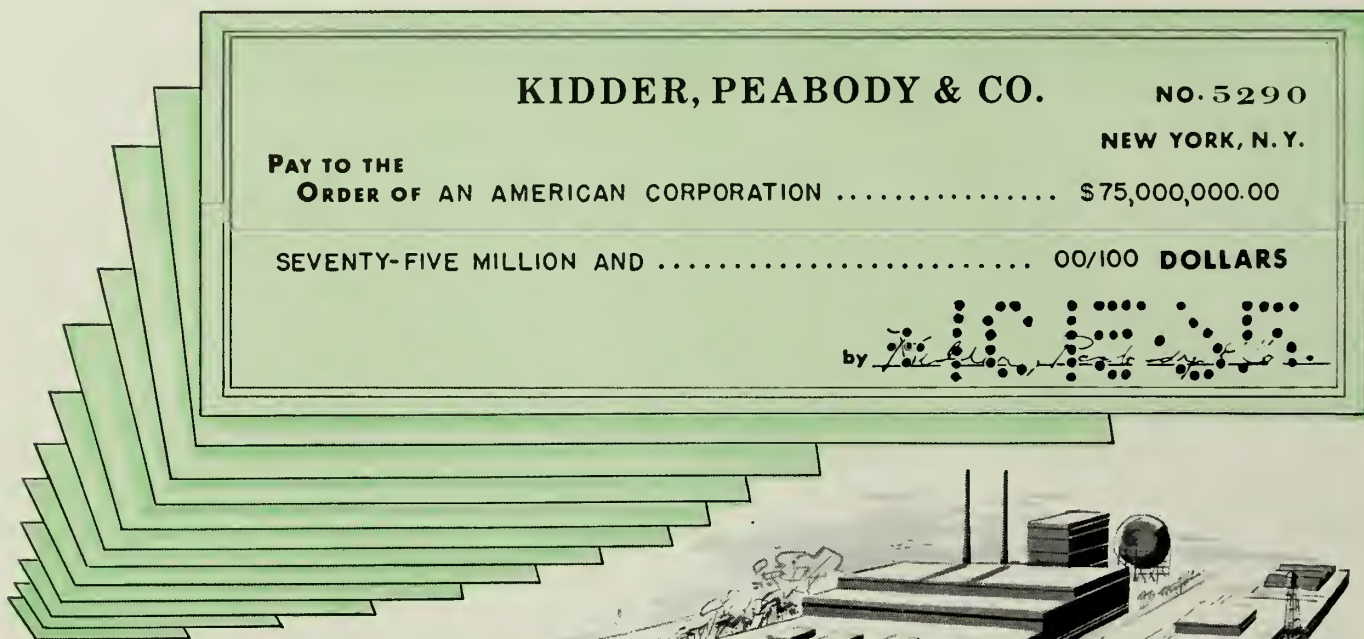
February 1958

HARVARD MEDICAL *ALUMNI BULLETIN*



Skydiver

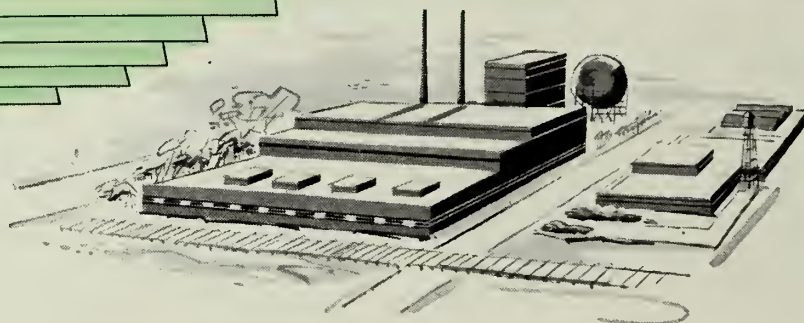
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softens stools and stimulates peristalsis

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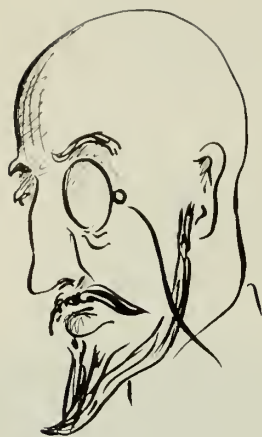
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- 3 — Return All Other Messages to the Correct Box.



atrists what the biochemist is to the internist, what physics is to electronics. I hope I make myself clear. The American Psychological Association has twenty-one divisions—General, Teaching, Experimental, Clinical, Industrial, Military, and so on. I'm involved with the motivation of psychotic patients, and used to fall under Experimental, but now I'm in Clinical."

Another young man, beardless and smoking a cigar that looked considerably older than he did, came up and was introduced as Dr. William A. McClelland, of HUMRRO. "Human Resources Research Office, of George Washington University, for better or worse," Dr. McClelland told us, through blue smoke. Dr. Beaver was quick to inform his colleague that a new journal was ready

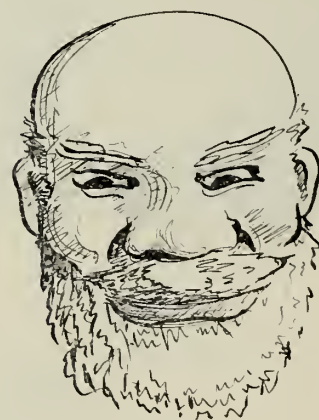
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Eight thousand psychologists were in town last week to attend the annual convention of the American Psychological Association. We visited convention headquarters, at the Statler, in the hope of discovering whither psychologists are drifting this season, and right off the bat discovered that psychologists don't drift. An exceedingly orderly lot, trim in appearance, brisk of manner, they know precisely what they're up to and why they're up to it, and if they have any commandments, the first must be "A place for everything and everything in its place." This rather chilling doctrine was exemplified by a sign we saw hanging above the message desk at headquarters, which at once whisked us back to our schooldays, giving us those old Stanford-Binet blues. The sign read as follows:

TO LEAVE A MESSAGE

- 1 — Write the Message on a Piece of the Special Notepaper Provided
- 2 — Fold It as Indicated
- 3 — Address the Envelope Plainly Showing
 - a) The Name of the Person for Whom the Message is Intended
 - b) Today's Date
 - c) The Date and Hour to Which You Wish Us to Hold the Message
- 4 — File It in a Box Identified by the First Two Letters of the Addressee's Name

As we stood at the desk watching psychologists, each with a name tab in his lapel, dart up like well-trained hungry mice to file and/or collect messages, we were kindly taken in hand by a young man with a red beard, whose name tab showed him to be Dr. Ogden Lindsley, Harvard Medical School. He caught us eying his beaver, and said easily, "We have a great variety of beards in our profession but, curiously enough, very few really first-rate red beards. Don't ask me to explain that. Or even to explain the present vogue for beard-growing and beard-keeping. Why the crew cut? Why the ponytail? Psychologists have very little information on such subjects. What bothers us is that we have equally little information on much more pressing problems. We study what we call basics; what is basic ought to be what we know best but is generally, of course, what we know least. Psychologists are to psychi-



to be announced; to be called the *Journal of the Experimental Analysis of Behavior*, it would be published by the Society for the Experimental Analysis of Behavior, and Dr. Beaver predicted that it would brew plenty of trouble. Dr. Cigar looked envious. A knot of politely disputatious psychologists approached the message desk, and we heard one say with vigor, "Don't tell me

there's anyone who knows more about sex than Frank Beach of Yale!" We expected a lively rejoinder, but a psychologist bringing up the rear boomed out, referring to someone whose name we didn't catch, "I was absolutely flabbergasted by his data. The fact of the matter is animals just don't like quinine," and the supremacy of Beach of Yale on sex went unchallenged.

Leaving the psychologists to talk shop, we proceeded to the mezzanine, with the thought of examining some of the psychological testing apparatus on display there. As far as we could make out, most of the devices were designed—no doubt in an excellent cause—to frustrate the natural appetites of rats, hens, birds, dogs, cats, babies, and other small creatures, and we felt nothing but dismay upon looking at them. We ended by taking refuge in the exhibition area of the Encyclopaedia Britannica. The gentleman in charge volunteered that he had sold five sets of the Encyclopaedia in the course of the convention and had more sales in prospect. "One thing I'm careful about with these fellows," he said. "I never ask them why they're buying. You try to get an answer like that out of them, it makes them suspicious. Asking a psychologist why is bad psychology."



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LETTERS

To the Editor of the *Bulletin*:

As a new member of the Council of the Harvard Medical Alumni Association, I wish to record my reactions to what I heard about the proposed program for the Harvard Medical Center, into which the Harvard teaching hospitals are to be integrated to form what Dean Berry describes as a medical task force.

Doctor Berry goes on to state that:

- (1) there are adequate funds now available for medical research;
- (2) the chief concern of the organizers of the Harvard Medical Center is with the wages of teachers and the subsidization of their clinical practice of medicine;
- (3) it is proposed that \$58,000,000 be raised to support this program.

To me this was a new and interesting situation. None of the \$58,000,000 that the school is hoping to raise is earmarked for research. \$8,000,000 goes for a needed library and the rest to teachers and to support clinical and academic facilities. The question that arises in my mind is whether it would be possible to organize clinical practice in such a way that it would support both itself and the teaching.

Subsidy for service, whether it be in agriculture, medicine or education, tends to perpetuate inefficient methods and delay effective adjustment to changing times. In these days of state subsidy, it is perhaps reactionary to suggest that the practice essential to medical teaching should seek its own level in the open market. Yet it also seems wrong for the clinical facilities of the Harvard Medical School to have to beg for support.

Two months ago, in a lead article of the *Saturday Review of Literature*, a science writer spoke of the dangers of oversubsidizing research. He suggested that the possibilities of basic investigation were so infinite that, if unlimited subsidy were given, an infinite number of projects might be developed without definitive objectives and with few conclusive results. He suggested that for effective results social and economic pressures should direct the mainstream of research. Perhaps the same reasoning could be

applied to teaching and to clinical practice. Perhaps too much subsidy could lead us out of the mainstream and into unproductive side channels. To prevent this, it is essential to remain sensitive to social and economic change.

The pattern of change in medical practice already has been set up by the health and welfare funds of organized labor, by the growing demands for prepaid services rendered by full-time, salaried physicians and by the growth of organized group practice. Insurance programs already have so altered the practice of medicine that there is no longer a sharp distinction between the private patient and the charity or teaching patient. In many hospitals the charity patients have disappeared. Paying patients, whether they are paying through insurance or as part of a prepaid plan, are being widely used for teaching.

It is certain that the number of prepaid and insured patients will steadily increase at the expense of charity and fee-for-service patients. In the face of such trends, it seems that a program of private practice plus charity-service teaching is impractical if not ideologically obsolete. What is required, it seems to me, is a full time group that could work together as a team and use their private, insured and prepaid patients to support themselves and their teaching programs.

Although it is desirable to raise enough capital to reorganize the hospitals of the Harvard group, the reorganization should be so planned as to make the practice of medicine help to support the teaching.

GEORGE CRILE, JR., '33

If—Kipling Were Alive

The following item was received by the Editor with the accompanying comment, "Don't bother to send it back."

From the *New England Journal of Medicine* for Dec. 5, 1957, page 1140: "Copy for advertisements is accepted by the advertising committee of the *Journal* on the basis of the apparent quality and usefulness of the product and the manner of its presentation. . . . Copy should be factual, conservative and in good taste."

From the same issue, among the advertisements: (This tranquilizer) is "of value in the hyperactive as well as the emotionally unstable child."

If you are young, emotionally unstable,
Or hyperactive, or, perhaps, a brat;
If you should find that sometimes you're
unable
To keep your mind on what you should
be at.
If there are times when you're inclined to
wander,
Or moments when you don't sit very still,
If there is something in the wild blue
yonder
That has appeal just dreaming cannot fill.

If there are times when you don't fit the
pattern
Established for you by Gesell and Ilg;
If you would rocket off to Mars or Saturn
Instead of drinking up your glass of milg.
If you would rather lead, perhaps, than
follow,
If you would rather climb, perhaps, than
slide,
If you're inclined to jump instead of
wallow,
If you're inclined to fight instead of hide.
If you have heroes that the world considers
As bearing somewhat less than worthy
names,
If you don't weep for all the victims'
widders
But worship Captain Kidd and Jesse James;
If opposition holds a certain virtue,
If you would rather win than keep the
rules,
If playing dirty doesn't disconcert you,
And if you are intolerant of fools.

If you would live a life that's free of
tensions,
Relaxed, at peace, in sweet serenity,
If you would rid yourself of all dissensions,
Then take a half a tablet, t.i.d.
If tyranny should stir you to a passion,
Or angerise when freemen's blood is
shed,
You'll find that tranquilizers are the
fashion,
And—which is more—you might as well
be dead.



(1) Take a picture one minute, have your slide the next. (2) Slip it into a mount, and (3) project it as big as you want.

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Copymaker that lets you make slides from any text material, existing photographs, charts, graphs, titles or what have you. You have a choice of two sizes of film— $2\frac{1}{4} \times 2\frac{1}{4}$, or $3\frac{1}{4} \times 4$ (for existing "Lantern Slide" projectors).

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in bronchiectasis—

*"Thick, yellow, solid sputum which had been expectorated with difficulty became thin, colorless and liquid sputum which was expectorated with ease and gradually diminished in volume. Labored breathing and insomnia, . . . soon were replaced by easy respiration and ability to enjoy normal restful sleep."**

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A typical Alevaire case history—C. S., 31 year old male with bronchiectasis and sinusitis, had had pneumonia six times. He had a continuous thick purulent postnasal drip and thick, yellowish green sputum; he expectorated at least a cupful of sputum each morning on arising. The patient was weak and debilitated, with chills and low grade fever. Bronchograms revealed advanced bronchiectasis. Antibiotics, postural drainage and expectorant cough mixtures had not helped.

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*Miller, J.B., et al.: Ann. Allergy, 12:611, Sept.-Oct., 1954.

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Cover photograph by Coles Phinizy, *Sports Illustrated* (story on page 36).
Cartoons on pages 4-5: Thorn W. Dickinson; on pages 19-21: Ernest Craige,
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ORANGE, N. J.

DIAGNOSIS DEFERRED

Tick Douloureux?

Not long ago the *Bulletin's* esteemed contemporary, the *New England Journal of Medicine*, alluded to the subject of medical history, approving of it on the whole. According to that not infallible source of information, medicine draws constantly on the past to provide a third dimension for the present, and perhaps the opposite is also true.

It is an interesting observation that in Boston, steeped in history as was the tea that went overboard at or in the vicinity of the wharf that bears its name, the active pursuit of the cult is maintained even more vigorously at Boston University and Tufts medical schools than at 25 Shattuck Street, Boston 15. For Tufts has Ben Spector to inculcate a reverence for the past along with his demonstrations in anatomy, and BU has borrowed the name of Benjamin Waterhouse, Harvard's first and stormiest professor of the theory and practice of physic, to incorporate in the title of its medical history society. On the whole, the medical student of today acquires by adsorption his knowledge of what went before.

If Tufts Medical School has Ben Spector, however, and Boston University has elevated Ben Waterhouse to the letterhead of its medical history society, Harvard has had the latter as professor in the flesh, and now has the grandfather's clock of his wife's grandfather backed into a corner of the faculty room. The clock also has a past and a present and very probably a future.

According to various authentic accounts the elongated timepiece, a product of English workmanship, was presented in 1790 to Dr. Waterhouse by the grandfather, just mentioned, of Mrs. W., the Honorable Justice Peter Oliver, a graduate of Harvard College in the Class of 1730. For a number of generations the clock solemnly ticked off the endless hours at what is now 7 Waterhouse St., in Cambridge, before coming to Shattuck St. in the fall of 1950

as the gift of Ben's great granddaughter, Mrs. Robert de W. Sampson.

The clock was designed as a 364-day masterpiece—something little short of perpetual motion—with 50-pound weights, and is still potentially capable of knocking off a year at a stretch, if the weights have somewhere to go beyond the limits prescribed by the case. It is assumed that openings were cut in Dr. Waterhouse's floor, like a pair of horizontal cat holes, that permitted the weights to descend into the cellar but an investigation by the late Assistant Dean Fitz disclosed no such holes, nor, indeed, any place in the Waterhouse mansion in which the clock could stand erect, except at the head of the stairs.

The clock was reconditioned at the Medical School in 1950 and was put into operation on December 20, at the annual Christmas party. On this occasion the first winding took place amid scenes of indescribable propriety. The clock has been running ever since, receiving its official annual renewal of energy at approximately the same date and hour and under similar circumstances. Since the University authorities have not yet given permission to chisel through the floor so that the weights can descend when their time comes into the underlying spaces, the dean is forced to give the mechanism a surreptitious extra hitch at about the time of the autumnal equinox. Otherwise it might function through all four seasons on a single cranking, like the friendships formed at Yale.

The clock and the portraits give the faculty room an atmosphere of being deeply rooted in the past. The chairs lend an air of symbolic mysticism with their curved arms representing swans' necks flexed in such a fashion that the beaks seem to be plucking at the bosoms, or what pass for bosoms in a swan.

The total significance of the swan in relation to Harvard Medical School is still cloaked in mystery although a

casual research has revealed certain facts about swans in general. Thus the swan, according to reliable authorities, is the largest waterfowl, belonging to the family of ducks (*Anatidae*, subfamily *Cygninae*). The swan is a beautiful bird although in its youth an ugly duckling.

There are seven kinds of swans, all of which feed mostly on aquatic plants. The *Encyclopaedia Britannica* credits certain varieties of swans with uttering only a hiss, whereas others have loud, trumpet-like voices. Despite their beauty they are said to mate for life. Although some swans are voiceless, all swans, at or immediately preceding the moment of dissolution, are expected to sing a swan song.

Swans, as the largest of the waterfowls, are practically always associated with the aqueous element and to some degree with the boats that pass over its surface. Lohengrin, for example, in the opera of that name, traverses the stage somewhat jerkily in a boat drawn by a swan; the swan boats in the Boston Public Garden, on the other hand, have their motive power in the stern.

In addition to swan boats and swan songs the English language is singularly blessed with other allusions to this noble creature. There are, for example, swan dives, swanherds, swan maidens clad in swan shifts—a polite name for shirts made of swan's-down—and annually, on the river Thames, the traditional swan-upping is held at which the cygnets (young swans to you) are marked according to their ownership by notching their bills. Ownership, an unprofitable business at best, is divided among Her Majesty, Queen Elizabeth II, and the ancient companies of Dyers and of Vintners.

At the drawbridge over the moat that surrounds the bishop's palace hard by Wells Cathedral a rope is left dangling at appropriate times of the day. When the swans tug at it a bell rings and food is forthcoming. No one in his right mind has suggested referring to the act as a cygnet ring.

But to return to the Faculty Room—

Along the Perimeter



Dr. Berry and Dr. Ellis

Hands Across the Sea

The distinguished British doctor and teacher, John R. Ellis, Physician to the London Hospital, recently made a visit to the United States at the invitation of Dean Berry. He holds in addition two titles that may not be particularly significant to the average American doctor. Nevertheless, it is in his capacity as SubDean of London Hospital Medical College and as Assistant Registrar of the Royal College of Physicians that he has become the vigorous leader in a drive for improved medical education in Great Britain.

Dr. Ellis is a qualified critic of comparative medical education, as well. During his recent trip, he participated in the Institute of the Association of American Medical Colleges in Atlantic City. Far from being as ponderous as its name, Dr. Ellis found this organization to be a valuable forum of American medical education in fostering the exchange of ideas among otherwise autonomous medical schools. Britain has no present counterpart, Dr. Ellis reported, but "we are now in the process of setting up a medical education so-

ciety that will try to serve exactly this purpose."

Americans, who are accustomed to unfavorable comparisons of their sprawling educational system with the formidable academic apparatus of European schools, will welcome Dr. Ellis' appreciative words on the quality of our medical teachers and teaching: He has noted the different and "idealistic" orientation of the teacher in the American medical school. Teachers in America, he said, attempt, "not so much to impart knowledge, as to inspire and guide the student to bring his own intelligence, previous education, industry, and character to bear on rewarding scientific and clinical problems and to ensure that the student acquires the ability to learn, and the interest to go on learning after qualification." He was impressed by the number of teachers in American schools who are prepared to accept such a program, even at great financial sacrifices on their parts. He found that the caliber of the graduating students reflects this devotion.

Britain has not kept pace with the times, Dr. Ellis said, in an informal talk at the meeting of the Faculty of Medicine on November 8. There the emphasis is on individual responsibility for the individual patient. The allocation of hospital beds to a professor on a permanent basis and the impact of medical specialization have compartmentalized teaching at the very time when integration is most needed. However, he did add that concern for the individual patient as a whole person is still the keynote of British medical practice and provides a salutary grounding in an age of technology and specialization.

Fortunately, Dr. Ellis had not come merely to praise Caesar. He

underlined many of the difficulties besetting American medical education. The United States, for instance, has no central body for the allocation of Federal funds comparable to Britain's "University Grants Money Committee." This body serves as a "buffer state" between the national government and the medical schools. The program is long-range rather than yearly in both outlook and operation; it is administered with complete freedom from political pressure. Another difficulty in the United States is the financial stringency imposed upon medical students, and especially upon young physicians seeking postgraduate training. Such are unknown in Britain where tuition and living expenses are provided by the government as long as a student's grades are satisfactory.

In a lighter vein, Dr. Ellis, as guest at the Alumni Council Dinner after the Harvard-Princeton game, confessed his perplexity at American football. He wondered whether the frequent huddles and consultations did not indicate that the players are a little confused! He admitted, however, that the game must have been fascinating inasmuch as it was the first time in four years' acquaintance that he had known Dr. Berry to sit speechless for half an hour.

Wishing to make reciprocal the Alumni spirit of the dinner, Dr. Ellis offered himself as the official representative of John Harvard, a fellow-Cantabrigian. In this capacity, he said, he was willing personally to assume full responsibility for the founding of Harvard.

Vanderbilt Common Room

The Common Room in Vanderbilt Hall was recently lightened and



David F. Lawlor

On a quiet morning, Drs. Peabody, Williams and Worcester look down approvingly on the recently redecorated and refurnished Common Room in Vanderbilt Hall.

brightened. Gone are the brown leather couches which were falling apart at the seams, and gone the miscellaneous assortment of straight-backs. Harvard chairs and low, leather-covered "Vanderbilt" chairs have replaced the latter; new red and black leather couches with foam rubber cushions take the place of the vintage meublement.

Perhaps the most striking change is the light natural pine woodwork, washed and bleached of its original dark stain by the Edward K. Perry Company. The walls, formerly a faded strawberry color, have been painted white and antiqued. The small round tables which were too high for convenience, are now cut down and matching new tables have been added to form small conversational sections, illuminated by recessed ceiling lights over each section. These provide a warm background lighting which, combined with the new table lamps, offers a great improvement over the poorly arranged floor lamps and chandelier glare of the past. The redecoration and refurnishing was planned and carried out under the supervision of the firm of Shepley, Bulfinch, Richardson and Abbott.

Those of a nostalgic turn, who

view all change sadly, will take comfort in noticing that the big table in the middle of the room has not succumbed to transiency, and that the Common Room floor is laid with the same pegged (random width) pine boards.

Second Year Show

Again, as in years past, administrative apathy and lack of October

Pathology slide quizzes made the Second Year Show a reality. This year, the Class of 1960 took the opportunity to investigate the Medical School's genesis.

It began, it seems, when for reasons of ebbing capital and prestige, the University decided that a medical school would be a fine investment, provided someone could be persuaded to foot the bill. They conceive the plan of sending a New England *nouveau riche* around the world to acquire the finest faculty from lower wage scale countries. But these plans run slightly askew when a janitor of long servitude walks into the board room to empty a waste basket and is mistaken for B. Becker, the expected wealthy Boston merchant. As the instructions are in Latin, the janitor assumes that by *staffem* for the new school, they mean *janitorial staffem*. He sets off on his round-the-world trip and returns months later, with an international assortment of unemployed janitors.

The president and deans are flabbergasted by the collection of faculty that assemble in Boston, all with signed contracts. The janitor, realizing his mistake, saves the day by suggesting that since no one department could possibly stand by



Jay Ted

"Satisfied Stratified Squamous"

Members of the Class of 1960 in a musical comedy number from 2nd Year Show.

THE DEAN'S CHRISTMAS PARTY



itself, they should integrate. With four lecturers going at once, it wouldn't matter what they said. The whole thing ends in joyous song.

The beer was free.

ERIC L. RADIN, '60

Brigham Opens New Surgical Units

On December 29, five new surgical units were formally dedicated and opened at the Peter Bent Brigham Hospital. The new \$400,000 area includes the Bartlett unit for the study and care of special surgical patients, a urologic unit, the Schoepf laboratories for research in anesthesia, reconstructed operating rooms and recovery room.

The reconstructed operating rooms were named after Dr. John Homans, '03, and Dr. David Cheever, '01, two surgeons who taught generations of students from the hospital's opening in 1913. The recovery

room was named after Dr. Elliott C. Cutler, '13, surgeon-in-chief of the hospital from 1933 to 1947, and his brother, John Cutler. The new urologic unit was named after Dr. William C. Quinby, '02, urologist at the hospital from 1916 to 1941.

Old Bottles—New Wine

A \$2,500,000 remodeling program involving two wings of Building B-2 at the Medical School is now underway. When completed in January, 1959, the renovated area will house the research activities of the Departments of Anatomy and Pharmacology.

Major reconstruction items will be the elimination of an amphitheatre (one of four at the Medical School)

and the insertion in its place of three new floors for research laboratories, the addition of a new floor between the existing first and second floors, and the insertion of another new floor between the present third floor and the roof. When completed the building will have five floors in place of the present three floors. All alterations will be done without changing the external appearance of the building.

The School's current remodeling program was assisted by a matching construction grant of \$1,126,000 from the National Institutes of Health, Department of Health, Education and Welfare.

The Crisis in Manpower and Medical School Admission

Daniel H. Funkenstein, M.D.

The Fourth Teaching Institute of the Association of American Medical Colleges, which was held at Colorado Springs during November of 1956, was devoted to the Appraisal of Applicants to Medical Schools. A total of 132 invited participants—including a score of psychologists—took part. They came from 98 medical schools: 84 in the United States, 11 in Canada, and 3 overseas. Other participants were drawn from universities, foundations, and governmental agencies. Among the participants the major medical sciences and clinical specialties were well represented, as were the social sciences.

Each year the Teaching Institutes focus on some important aspect of medical education. They were inaugurated by Dean Berry in 1952 during his term as President of the Association—under his wise and inspiring leadership they have become major contributions to medical education.*

The present paper is a summary of the highlights of this, The Fourth Teaching Institute. Two of the main topics will be discussed: *The Prob-*

lem of Medical Manpower; and The Appraisal of the Candidates' Intellectual and Non-intellectual Characteristics. For details on these subjects and for information about a variety of related topics which the limitations of space must preclude from present consideration, the reader is referred to the Report of the Fourth Teaching Institute. (5)

The Problem of Medical Manpower:

The number of applicants who apply annually to medical schools has markedly decreased during recent years, but even more alarming is the decrease in the academic performance of the applicants (Table 1).

Table 1 UNDERGRADUATE GRADE AVERAGES OF FIRST-YEAR MEDICAL STUDENTS *			
Year	% with grade average of		
	A	B	C
1950-51	40	43	17
1951-52	30	55	15
1952-53	18	68	14
1953-54	21	69	10
1954-55	17	69	14
1955-56	16	71	14

* Data from The Journal of the American Medical Association, 161, 1956, p. 1659.

In the eyes of college students, medicine is apparently no longer the attractive career that it once was. Among the suggested reasons are: the loss of prestige of the medical profession, the length of the educational program in medicine, and the

rapid social changes in our society.

Today of every 100 boys in the top quarter in ability in the United States, 48 enter college but only 35 complete college (2). A small percentage only go on to post-graduate education. In some cases the cause is financial, but in the majority of instances the students lack the values consonant with an interest in intellectual matters.

Dael Wolfe pointed out that recruitment for medicine is essentially that of recruitment for the learned professions in general. It is more important to increase the number of able students going to professional careers than to change the distribution of students electing one profession in preference to another. This finding is well illustrated by the recent campaigns of the Engineering Manpower Commission and The American Chemical Society to increase the numbers in their fields. Following their efforts, an actual increase in the percentage of college students entering these fields occurred, although at the same time there was a decrease in the percentage entering other fields, including medicine. The problem is to increase the "pool" in which all of the learned professions "fish." It is the problem of changing the values of a large segment of our society to the end that it can produce men interested in these fields. Efforts must be made, not only at a college level, but at secondary and grammar school levels. The entire problem of medical school admissions was summarized

* The Teaching Institutes were proposed in Dr. Berry's Presidential address (1).

The Reports of the preceding Teaching Institutes have all been published in the *Journal of Medical Education* as Supplements. The First on "The Teaching of Physiology, Biochemistry and Pharmacology" with the July number, 1954 (Vol. 29, No. 7, Pt. 2); the Second on "Pathology, Microbiology, Immunology and Genetics" with the September number, 1955 (Vol. 30, No. 9, Pt. 2); The Third on "Anatomy and Anthropology in Medical Education" with the October number, 1956 (Vol. 31, No. 10, Pt. 2).

by Wolfe when he emphasized that there is both a research problem and a social problem to consider. "The research problem is . . . to discover what are the desirable methods of selection, what are the qualities which we want to select, and what are the qualities we consider desirable. We also have the large social problem of fitting requirements for medicine as a career into the general framework of inspiring talented youngsters to make the best use of their talents so that, whether they choose to enter medicine, or science, or law, or teaching, or something else, they can contribute most to society in terms of their abilities, their talents, and their interests."

The Appraisal of Applicants

The Evaluation of the Intellectual Characteristics of Students was presented by a committee under the chairmanship of Dr. Robert J. Glaser, and the Evaluation of the Non-intellectual Characteristics of Applicants was the subject of two committees: one on the Interview under the chairmanship of Dr. Joseph J. Ceithaml, and the other on Psychological Testing under the chairmanship of Dr. Woodrow W. Morris.

The Evaluation of the Intellectual Characteristics of Students:

In this area the greatest accuracy in the evaluation of the student has been achieved. The combination of an applicant's scores on the Medical College Admission Test and his academic record is a sensitive indicator of his ability, from an intellectual standpoint, to complete Medical School successfully. The low failure rate in medical schools attests to this.

Despite the high predictive value of the M. C. A. T., it is still necessary to consider carefully each applicant individually, especially when there are discrepancies between his test scores and his academic record. As examples, let us consider two applicants with almost identically fine academic records at an outstanding college, each of whom made low scores on the M. C. A. T. Additional

testing showed that one man could not perform when timed (the M. C. A. T. is a timed test), but when given tests in which time was not an element, he did very well. This man was admitted to medical school and has consistently remained in the top third of his class. The other young man was found by further study to perform poorly on such tests owing to extreme anxiety in the test situation. Additional testing and interviewing revealed a man with many neurotic problems needing psychiatric help. It was recommended to him that he seek such help before entering medical school.

These cases are exceptional. In most instances, the M. C. A. T. and the student's academic record are consonant. The M. C. A. T. also makes possible a comparison of the capabilities of students in different colleges—it is difficult to equate grades at one school with those at another. Despite the present high success of the M. C. A. T., the Association of American Medical Colleges in conjunction with the Educational Testing Service is making continual and extensive efforts to improve it.

The Appraisal of the Non-intellectual Characteristics of the Students:

The importance of the so-called non-intellectual characteristics of students and physicians needed no emphasis at the Teaching Institute. Failure of students to reach their potentials in medical school is more frequently related to personality factors than to lack of basic intelligence. Maturity, integrity, motivation, and a service orientation were among the desirable traits mentioned frequently. Selection for these qualities poses infinite difficulties, especially when it is realized that *it is as important to assess what the applicants are at the present time, as to decide which applicants have the capacity for growth and development and which do not.*

Another problem in selecting students for these qualities is the lack of adequate criteria of successful or

unsuccessful medical careers. Compounding the difficulties is the great diversity of the characteristics, the abilities and the roles of doctors in different specialties. Consider, for example, the differences among general practitioners, surgeons, hospital administrators, and psychiatrists. Then too, selection must be for the doctor-of-the-future, rather than selection of students with the image of present-day physicians in mind.

For evaluating these characteristics of students, two techniques received much discussion: the Interview and Psychological Testing. Some of the problems in each area are summarized below.

The Interview:

The interview is the selection tool with which there is the greatest dissatisfaction, not only by applicants, but by members of admission committees as well. As several participants pointed out, there is little or no evidence that the interview by itself is predictive of the success or failure of an individual in medical school. However, there are many other uses for the interview: verifying and clarifying information obtained about the applicant from other sources; enabling the student to explain in person any unique or complicated aspects of his application; helping him to find out more about the medical school to which he is applying; allowing the interviewer to make an assessment of whether or not this is the best school for this particular student. The interview is also necessary for public relations. One school discontinued it, but received so many complaints that the school was rejecting applicants without even seeing them, that interviews were soon reinstated. It was the consensus that within its limitations, the interview is useful. As one participant pointed out, "No matter how high her grades and test scores, or how glowing her recommendations, one would not want to choose a wife without an interview." Research on the use and validity of the interview is greatly needed.

Psychological Testing:

It was recognized by the majority, that new psychological tests will have to be developed to predict performance in medical school at a much higher level of validity than is currently possible, before such tests can be used as major criteria for admission. However, there are other ways of using psychological measures. If one thinks of admissions in a broader and more positive sense, then psychological tests would seem to have much to offer, provided additional research is carried out. In such a context, admission committees would have multiple functions:

1. Selecting students who will successfully complete medical school.
2. Identifying the positive personality qualities that are associated with the development of able physicians.
3. Selecting students who are most apt to benefit from the program of a particular school.
4. Understanding the personalities of the students admitted and interpreting to both students and faculty the interactions in the relationships among the students, the school, and its faculty. Thus experimental methods, selected by means of previous investigation, could be instituted by the curriculum committee to facilitate the learning and maturing process by better fulfilling the needs of the individual students.
5. Identifying at the time of admission those students who are apt to have difficulties, either emotional or academic. Plans could then be made to help such students surmount their difficulties, either by individual help where indicated or, if such students are numerous, by altering the school situation.
6. Pooling information with other schools to determine which students do well in which schools, so they may enter schools that offer them the maximum opportunity for learning and development. This implies the eventual close cooperation of premedical advisory committees.
7. As a corollary, continuing studies by the admissions committees of themselves, so they may learn some of their individual and collective biases of which they are now unaware. This would result in more objective evaluations of the applicants.
8. In a very special situation (and at our present state of knowledge)

psychological tests could be of considerable help to admissions committees, e.g., in the evaluation of an applicant who has recovered from a psychiatric illness.

Before discussing the contributions that research using psychological test methods can make to admission procedures, it must be pointed out that such tests have a number of weaknesses. Basic research is constantly underway attempting to surmount these difficulties. It should also be understood that psychological tests, like chemical or physiological tests, are laboratory tests—they can never be used as the sole means for evaluating an individual.

Many studies on the use of psychological tests for admissions are now underway on both national and local levels. Only after prolonged research will valid information be forthcoming that is applicable to medical admissions. The material presented here is confined mainly to the results of studies involving psychological testing in various undergraduate colleges that can be projected to medical schools.

In order to facilitate discussion, data from a number of different experimental projects are presented under the following headings: 1. The Student; 2. The School; 3. The Admission Committee.

The Student:

Social Factors:

There is a high correlation between students' grades in college and their fathers' educations and occupations, even when the students' scholastic aptitudes and secondary school records are not significantly different (Table 2). Studies by several social scientists indicate that college families pass on to their children, probably early in life, certain values that lead to good motivation for academic achievement. This does not mean that less educated parents cannot do the same, only that they are less likely to do so. Intense research on the determination of the dynamic personality factors involved in this interrelationship between academic achievement and families is needed.

Basic Personality Factors:

Perhaps the most easily understood studies on the prediction of behavior of college students are those of Stern, Stein and Bloom (8). The following material represents a synthesis of their work and our own independent work at Harvard College.

Table 2
RELATIONSHIP BETWEEN
GRADES OF SELECTED
FRESHMEN AT AN
EASTERN COLLEGE AND
PARENTS' EDUCATION *

(aptitude and secondary school records similar)

Parents education	Students' freshman grades	
	Top two quintiles	Lower two quintiles
At least one parent college graduate	22	7
Neither parent college graduate	7	15

$$\chi^2 = 9.89 \quad p < .01$$

* Data from Farnsworth, Funkenstein, and Wedge. (3)

Stern, Stein and Bloom studied the entering freshmen at an eastern university, using psychological tests devised to identify students with certain clusters of personality traits. Two of the clusters were designated as characteristic in one instance of S-type students, and in another of N-type students, each of whom made up 16 per cent of the total sample students. At the end of the first year, 23 per cent of the S-type students had withdrawn, whereas only 1 per cent of the N-type students had such difficulties. As significant as these results were (.01) they indicate one of the difficulties of psychological testing. Eventually, approximately one-half of the S students were successful in college. If they had been excluded, many potential graduates would have been lost. This is owing to the absence of tests at the present time that will differentiate students who will grow, mature and change from those who will not. In psychoanalytic terms, such measures would be related to *ego* strength, i.e., the

ability to master at a mature level, problems within and outside of the personality. If we were to exclude from admission students falling into certain types, we would exclude a great number with the capacity for change, growth and successful completion of college.

Factors Within the Personality:

Increasing understanding of student personality types can be acquired by looking below the surface on a deeper level within their personalities. For example, the S-like and N-like students have different perceptions of their families. Projective tests show them to be different in their unconscious fantasies, which are of great importance in determining their motivation.

The School:

The great strength of American education is its diversity. Different schools have different values and educate in different ways. It is not a question of which is "best" or "worst"; rather it is important that different schools meet different needs of students and of society. We need many types of schools and many types of students.

Colleges, as well as medical schools, can be placed on a continuum from extremely "pragmatic" to extremely "ideistic" (3). As an example, using a battery of Authoritarian Scales devised by Levinson (6) we were able to find significant differences in the ideas of entering freshmen at two colleges. Using different measures, Gee (4) found many differences in the students in different medical schools.

Many students have difficulties traceable to their admission to a school that is not suited to their personalities and needs. When a student enters a college or medical school where the values of the schools differ markedly from his own, a great emotional strain is placed on the student. In order to survive in the school, our research indicates that he pursues one of the following courses: he adopts the values of the school; he

withdraws, rebels and falls into disciplinary difficulties; he isolates himself from the rest of the student body and develops rigid defenses; he surrounds himself with similar students who give him psychological support.

If admission committees understood the prime values of their schools, and understood by intense psychological testing and other techniques the personalities and social and cultural backgrounds of the students, selecting the applicants most apt to benefit in a particular school would rest on a firmer scientific basis. Certain students, who were apt to have difficulties in a particular school but were still desirable candidates because of overriding assets, might be identified, their problems understood, and if necessary, special efforts made to help them succeed. Only a minority of such students might need psychological help. On a theoretical basis, the opportunity for a student to work closely and to identify with a mature faculty member as a tutor advisor would be much more to the point in helping the majority of such students adopt new values. To put into effect such an ideal program will require years of research into the factors involved.

The Admission Committees:

The study of the biases of which men are unaware has been one of the major contributions of psychoanalysis. An example of the kind of error admission committees can make without awareness was seen in the selection of the so-called "Ford-Scholars," who were an average of two years younger than their classmates. Originally, some faculty members had felt that these men would be handicapped by reason of their size but after discussion this was ruled out. A year later when someone remarked on the large number of tall men among the group, an examination of their heights showed them to be significantly taller than their older classmates. The admission committee was unaware that they had used height as a criterion for admission; actually the pool of appli-

cants contained many able students of average height. Studies to discover any biases of which they may be unaware is an important part of the function of an admission committee.

Two other aspects of selection that received considerable attention in the section on Psychological Testing were *Motivation* and the *Problem of Students Who Make A Career Choice Late*.

Motivation:

It is a common statement, amounting almost to a cliché, that students who do poorly lack motivation. Studies of the dynamics of motivation as related to personality and cultural and social factors are needed. It can be understood at many levels of personality. In many cases, the student is unaware of his true motivation, for it is unconscious. Then too, it is perfectly possible to be highly motivated for the "wrong" reason—for example, the M. D. degree may be sought for monetary gain.

Receiving considerable discussion was the Strong Vocational Interest Test, which enables some inferences to be made about motivation. When the students' interests coincide with those of successful members of a given profession, studies have shown that the motivation of such students is apt to be good for that particular profession and that, given sufficient intelligence, they will be successful and happy in it. This test has an important place in studying applicants for medical schools and in counseling college students in general.

Many interesting aspects of the motivations of sons of physicians were discussed at the Institute. This is a very fertile field for research, but a most complex one.

Students Who Make A Career Choice Late:

Many able men in all fields have had difficulties during adolescence and have tried several professions before settling on their final choice. Alan Gregg characterized them as

"late bloomers" and they may be described in Erikson's terms as late in establishing their "identity." Different individuals mature at different ages; they follow no timetable. Some men who make a late career choice—"late bloomers"—will have productive professional lives; other men making late choices are highly neurotic individuals who will not stay in the profession; they are still seeking to "find themselves" and the study of medicine is only a step in the process. Research directed toward distinguishing these types of applicants is needed.

Conclusion:

The present discussion is only a fleeting coverage of some of the subjects explored at the Fourth Teaching Institute. Among the other topics considered were: The Typical Admission Procedure, The Student's View of the Medical Admission Process, The Undergraduate College View of the Medical Admission Process and The Methods and Goals of Medical Student Selection.

Need For Research:

Receiving emphasis throughout the Institute was the need for research on the admission process. Under the aegis of the Association of American Medical Colleges, Dr. Helen H. Gee is carrying on an extensive study at the national level. Intensive investigations at each medical school are needed to supplement her work. The techniques of the behavioral sciences have reached a level where they can make major contributions to understanding in this area.

Moving the admission process and the entire study of human personality to a more scientific basis will require years of research. Many of today's problems cannot yet be solved. A major retarding factor is the great resistance to such studies by students and faculties, more by faculties than students. Human behavior and values are as open to scientific investigation as are other phenomena. Only a bare beginning has been made. One is reminded of the time in medical

history when disease was believed to result from the activities of demons and devils. The consequent difficulties encountered by early investigators in studying by scientific methods the physical ills to which man is subject were overcome. This should make us optimistic in seeking to overcome the obstacles to studies of the human personality in interaction with its environment. Indeed, the climate for studying the behavioral sciences has improved vastly in the past few years and one can look forward to rapid improvement in the future.

A charge frequently leveled against the use of psychological testing in selection procedures is that reliance on such techniques will lead to the selection of men who conform to certain patterns. The "well-adjusted," unimaginative conformist will generally be the man selected. The unusual, imaginative maverick who is apt to be the real contributor but who does not fit this conformist pattern may be eliminated. Currently, much research is needed on the identification of the mavericks, but beyond such identification one must distinguish between the maverick who will be a real contributor and the one whose deviance merely represents nonproductive egocentricity. This is one of the difficult problems faced by medical school admission committees.

Many feel that the social scientist and psychiatrist wish to turn educational institutions into vast social laboratories—which they can and will control. Far from it! There are many disciplines outside these fields that have been contributing for many years, and will continue to contribute, to the solution of the problems discussed in the present paper. We wish merely to cast some new light and to arouse some awareness of factors that are often neglected. Understanding such factors can help administrators to make more knowledgeable decisions and can provide a basis for professors to improve their teaching. And most important of all, admission procedures

can be based on the philosophy of helping each individual student reach his own educational goal and his highest potential as an individual. Only by understanding the personalities, the needs and the motivations of each applicant, and the social climate of its own and other schools, can the admission committees make the wisest choice in each case. Then it would be possible to develop a "counseling" attitude, rather than denying admission to certain students.

Dean Mitchell of the University of Pennsylvania (7) has described the attitudes of most people toward medical school admissions, as a feeling that there is a distinct plot along the lines of a detective story. Continuing, he says:

"The victim is the applicant. The cast of possible culprits is the admission committee. All clues point to the interview as the real villain. The dean is cast in the role of detective and district attorney combined."

With awareness of the multiple problems in this important area, and with research to develop sound knowledge of the factors involved, one can hope to change such attitudes. The Fourth Teaching Institute at Colorado Springs was a major step toward this goal.

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If You Can't Eat It,

It's No Good

Robert S. Shaw, '45

There seems to be a particular pleasure in eating food that one has procured from nature by oneself. This may represent the satisfaction of some primordial instinct passed on to us from our hunting and foraging forefathers. Certainly it is vestigial in our recent culture and, like body hair, is exuberant in some individuals and totally lacking in others. None the less it exists and explains the \$50 trout and the \$30 duck that so many of us bear proudly home and consume with such relish. It is a fact that the venison you kill tastes better than the venison given you by your brother-in-law, and that the striped bass you caught is far superior to that which can be secured from the fish market far more easily and at a great saving. The same instinct explains the enthusiastic consumption of inferior and expensive home-grown garden produce, of wormy home-grown apples, of soggy home-brewed beer.

The enjoyment of this pleasure, like the enjoyment of wines, music, art or any sensual pleasure, can be cultivated, extended, and amplified by increasing the variety of experience and the foundation of information.

Such an elaboration of "wild eating" implies the consumption of unfamiliar foodstuffs and consequently collides with another unconscious ancient behavioral characteristic,

fundamental to our survival as a species and perhaps stronger than the first. From time far beyond the shadows of history, parents have protected their children from eating things that they themselves did not eat, and the elastic and adaptable tastes of the children are congealed by maturity before they in turn feed their children. The eating of unfamiliar food requires the breasting of a massive barrier of training and conditioning that is usually accomplished only under the pressure of starvation, with the reassuring precedent and example of a large number of one's associates or by gross modification of cerebral function by mental disease or martinis. This limitation of the eating habits is exemplified by the fact that to ten successive New England generations the eminently edible-appearing tomato was a decorative plant, the "love apples" being considered deadly poison, although this opinion may have originated as a Puritan interpretation of their older reputation as an aphrodisiac. The deliberate overcoming of this reluctance to eat the uneaten is a real triumph of intellect over emotion and as such requires intelligence regarding the possible toxicity of the substance in question. This fundamental information can be had from observing or reading about the eating habits of other people and from at least a superficial understanding

in the science of toxicology.

Dr. Wyman Richardson introduced a whole community of summer Cape Codders to the epicurean possibilities in what is usually thrown away when the fish are cleaned, and now among these enlightened people the livers of the striped bass, fried and consumed with cocktails, are more precious than the highly prized muscle of the fish. This amplification and development of the joy of catching fish was easily accepted for a variety of previously stated reasons: 1) books relate that the Eskimo eats and enjoys such things; 2) a respected authority demonstrated their eatability; 3) the accompanying beverage relaxed the prejudices; 4) you get awfully hungry out fishing; and, 5) they are perfectly delicious.

This bass liver experience has been successfully extended to other fish, but because of the microdissection required in small pan fish, it is most feasible with larger fry. This advantage of a large fish is readily apparent in the case of the Tuna. The catching of a Tuna is generally considered an adventure in itself, but is an incomplete and unsatisfactory adventure because the flesh is not quite delicious and the appetite very quickly pales before a hundred pounds or so of meat. Thus the fulfillment of catching, i.e. eating, is seldom accomplished. However, cleaning these great fish opens a new

world in the understanding and appreciation of these craniate vertebrates, since the viscera instead of being a wad of dirt on your thumb are a noble set of organs, near human in size, and can be clearly differentiated. Its liver is well worth processing as described, though smaller for the size of the fish than that of a bass. Further rummaging will uncover the heart at the base of the gills. This extraordinarily vigorous fish has a heart which in an 80 pound specimen will be the size of a baby's fist, solid firm muscle and entirely lacking in fishy taste, being comparable to chicken or duck heart in flavor. The largest organ is the pancreas. It is a formidable appearing organ and from the shortness of the gut must be an extraordinarily effective one. It oozes enzymes at the touch, and one has the impression that one's finger would dissolve if thrust in it. At the present writing there is unfortunately no data available on its culinary qualities but it may have a great future in the treatment of malabsorption syndromes, celiac disease, sprue, or the like.

Fish liver tastes like the roe of the same species, and like the roe has a little more zest in salt water than in fresh water varieties. Fish roe in various forms is famed in song and fable and needs no exposition here. Fall trout fishermen, however, might be alerted to note the similarity of trout roe and salmon roe (the "American Caviar" that appears on the tray of canapes). Individuals have been known to be so overwhelmed by this similarity among other things that they scraped it off the dock with their forefingers, but it goes best well-salted on crackers with Bourbon. The oils, amino acids, and what not that make fish eggs attractive, be it in the form of caviar or shad roe, are not unique to the finny fish but are encountered in other orders like the echinoderms, and sea urchin roe has long been considered a delicacy by Mediterranean peoples. Sea urchins may be seen displayed in Boston Italian markets and can be gathered in abundance just below low tide level along the coast of Maine,

although this exercise leads to serious cremasteric spasm unless done from a boat at a "lowdrain" tide. The creature is cracked like an egg and the orange roe washed clean. It will go down raw but is truly delicious and generally appreciated if treated like bass liver. At cocktail parties these things are probably best served unannounced since nonobservance of this rule has resulted in serious failures to convert the uninitiated.

A true beauty of this attempt to fulfill the ancient role of food procurer is that one need not be frustrated by the failure of a fishing expedition, for failure to catch fish usually means that you still have plenty of bait. This of course would not apply to fly fishermen, but salt water bottom fishermen, though looked down on by some, are strong in this regard. The shellfish used

for bait are generally the same as those purchased in the Union Oyster House, and a littleneck clam eaten from the gunwale of a rowboat is in many respects superior to that eaten off an oyster bar. Squid is famous as a saltwater bait but is not sold in the Boston markets for Tony to fish with. The Italians stuff these creatures with cheese and stew them with the usual conglomeration for a sauce with pasta, but they are very good dipped in batter and deep-fried; and boiled make a slightly tough but quite acceptable "lobster salad," resembling lobster in color and taste. After trying such a salad one recalls lobster salads one has had here and there in the past, and wonders.

The seashore provides the richest variety of animal eatables, but the woods and fields are the best providers of vegetable "wild eating." If

"... bait ... superior to that eaten off an oyster bar ..."



the inland hunter and fisherman would define his mission as the fulfillment of a forgotten role as procurer of food, rather than rigidly freezing his intent on killing a particular animal he would come home happier. It's an unlikely Neanderthal who would follow a cold bison track past a brimming berry bush without stopping a while, and a mess of frog legs can salvage an unsuccessful salmon hunt.

Blueberries, blackberries, raspberries, wild strawberries, are instantly recognized by all, and are associated with pleasant memories by most of us. They are recognized and appreciated, however, because they have already entered our eating patterns through their cultivated cousins or through our boyhood experience. The woods are full of foods, appreciated by the foraging Indians, but unfamiliar to us only because they have not lent themselves to cultivation and mass production, not because they are in any other sense inferior.

Foods which do not occur in abundance lend themselves to being eaten as they are encountered, rather than being brought home for the

table. Our bison-chasing prehistoric ancestor must have grazed much of his food in this manner, and such is the behavior of boys as we will recall if we strain our memories back to the days of grass stems and checkerberries or maypops.

One of these nibbles very common in the deep woods but generally unrecognized is the Indian Cucumber. This plant is readily recognized by its two rings of elongate leaves with the stem rising through the center. It has a finger-sized tuberous root, like cucumber in crispness, coolness, translucence, and flavor. The discovery of this plant can provide a delightful distraction from the fatigue and thirst of a long homeward trudge through the afternoon summer woods.

Those who enjoy the grass stem nibble may have this in salad quantity from the cat-o'-nine-tails. The tender stem of this large and abundant "grass" is a half inch thick and an inch or more long. It tastes much like an ordinary grass stem with a very slight overtaste like olive oil which enhances its contribution to a salad. The Indians also harvested this plant for its young flower spikes

and its starchy root. Many of the Indian's staple foods were roots or inner-barks requiring a patient squaw who would give them an extensive processing including a long working over with a mortar and pestle. This pretty well rules out their use by modern American man. The root of the Cat Brier or Bull Brier is such a food, but the younger shoots of this plant also may be eaten. They are cooked like asparagus and have the unique distinction of imparting the same aroma of methyl mercaptan to the urine. Young milkweed plants boiled and served on toast are also remarkably similar to asparagus but the resemblance is gustatory rather than excretory.

Greens or pot herbs are legion. One of the most satisfying is Lambsquarter which has an almost universal presence in home gardens as a persistent, rank and overwhelming weed. This weed can be cooked to yield a very tender and delicate spinach, which serves it right. Most of the better wild greens have a widespread regional use where they are abundant. An example is the young fern fronds, or "fiddle-head greens" eaten in the state of Maine. If one is so fortunate as to have established friendly contacts among a rural population, conversational inquiries in this direction may be rewarded by an invitation to dinner. Generally these people get a kick out of educating the "city feller."

In the wilds the most spectacular hauls of table food are to be had from the fungi. The deadly alkaloid, phallin, occurs in only one readily recognizable and avoidable family. Other poisonous fungi are toxic primarily by virtue of muscarine alkaloids and manifest their toxicity by inconvenient gastrointestinal symptoms which are usually mild and readily reversible by atropine. This fact explains the low mortality from the happy-go-lucky and relatively indiscriminate family mushroom hunts of some of our European immigrants. Certainly it is best to approach the eating of wild mushrooms as a botanist, hav-

"... the \$50 trout ..."



ing certain knowledge of the species of the gathered plant.

Fortunately, the best of our native mushrooms and the only one unquestionably superior to the cultivated variety is absolutely unmistakable. The morel, or "sponge," looks like a light brown prune on a large hollow stem and appears in the spring before the leaves are fully out and other mushrooms make their appearance. The morel is apt to occur in sparse scattered plants, poking up among the dead leaves on the forest floor, and requiring a lot of searching. The spring trout fisherman would do well, however, to keep his eyes open for the occasional abundant fruiting which may give a full creel and an overflowing hat in 5 or 10 minutes. They may be prepared for table in any of the conventional ways, or may be dipped in butter and fried if one is an ambitious cook.

Another readily identifiable mushroom is the "Hickory Jack," a term loosely applied to the elm and the oyster mushroom. These are members of the family pleurotus, the only white-gilled mushrooms with a stem arising from the side rather than the center of the cap. There are no toxic members of this family and the uncommon inedible varieties are uneatable because of small size, woody texture or bitter taste. These summer mushrooms grow on dead limbs in ranks and tiers which may yield 30 or 40 pounds and provide a main course for the evening meal.

Access to a standard text and a little consistent curiosity will rapidly increase the number of recognizable species and enable most of the commonly encountered worth-while varieties to be exploited. Good pickings of mushrooms will be made only a few times a year since their growth is dependent on the weather and they don't last well. Like manna (Exodus 16:20) they "breed worms and become foul" if left too long after their appearance. (Indeed it would be pleasant to think that Moses and the children were picking mushrooms in the wilderness; how-



"... inconvenient gastrointestinal symptoms . . ."

ever, scholars hold that manna is the dried sugary excreta of a scale insect which is alimentarily interested in the sparse protein in the sap of desert plants and so passes on the more abundant carbohydrate.) Thus such fruit are the occasional bountiful rewards of the educated peeled eye and versatile palate.

It is impossible to more than suggest the wide variety of wild vegetable produce in this space. The subject required 451 pages in *Edible Wild Plants of Eastern North America* written by Fernald and Kinsey before the latter became interested in other manifestations of the spice of life. (Fernald, M. L., Kinsey, A. C.: *Edible Wild Plants of Eastern North America*. Idlewild Press, 1943.) The intrigued would do well to unearth a copy of this book for bed-time reading.

One gets the impression from this text that almost every plant will provide food, although many of the items require a cumbersome amount of preparation or qualify only as

starvation food. The inner bark of the white pine, for instance, is described as sugary and good, and full of digestible carbohydrate, but it is unlikely that the average M.D. would be moved to strip the bark in the spring, dry it over the summer, and grind it for a meal or bread in the winter. One also would be feebly inclined to collect acorns, crush them, leach out the tannin with hard wood ashes, and grind them for porridge. Even so it might be fun to try this sort of thing once, bringing the processing up to date as with KOH soln. instead of wood ashes; and it is comforting to have this kind of information in these days of atomic uncertainty.

It is exceedingly unlikely that the adventurous eater will make more than a rediscovery of a worthy food, but the joy of eating your own catch is undeniable and represents, along with the current "do it yourself" move, a pleasurable rejection of our extremely organized and specialized economic society.

Editorial

MUSINGS UPON THE FRAILTIES OF MAN

We are accustomed to the philosophy that disease impedes the progress of man; that disease, no matter what it be, interferes with and degrades a human more than it brings forth the optimum in him. We tend to pity the deaf, the blind, the halt, the arthritic, the crippled, the consumptive and many others because so often such afflictions can and do block the ultimate development of man in his natural struggle for accomplishment. Our pity is in essence directed at an imperfection, a physical or mental imperfection which often is intolerable for the person who has it.

But consider the frailties of man! Who among us is not directly governed in action by his frailties, whether they be of mind or body? Much of life revolves around our efforts to overcome these frailties. Is it possible that in the proper soil, in the proper individual, an affliction may be the very source of stimulus that pushes us ahead and results in improvement rather than degradation? Is it perhaps logical for us to say that certain oddities of character or body seem common among great men? Is it also true that not all great men need be queer—but it helps? In short, do human frailties in some act as a force that stimulates success rather than failure? In idle musing on this subject countless cases come to mind that may well be included under a title, "The Frailties of Man."

Demosthenes, the great Attic statesman, grew to manhood a stutterer. Biographers have delighted to relate how painfully he made himself a tolerable speaker; how with pebbles in his mouth, "he tried his lungs against the waves" and how, finally, he overcame his affliction and became one of the greatest orators of Greece.

Caesar, the Emperor, had epilepsy. For many, such a disorder is inconsistent with success. Whether he had grand mal or petit mal is not clear, but whatever the case, it is interesting to speculate upon the effect this disorder may have had in spurring his struggle towards greatness.

Dostoevski had epilepsy also, and this affliction allegedly was aggravated by political restraint placed upon him at the time of the reactionary wave that spread through Europe after 1848. What effect his disease had in stimulating him we do not know. But at least one of his great novels, *The Idiot*, deals with an epileptic, and it is easy to see how this disorder and the overcoming of it could have set the pattern of his life and colored his creative thinking.

Martin Luther was probably of the manic-depressive temperament. He was a "frenzied theologian" in whom superstitions apparently ran wild. From the age of 30 he suffered from hypertension, angina, perhaps Meniere's disease, and vague cerebral symptoms that he interpreted as being certain evidence that his own personal devil was attacking him. We may cogitate on the part his own devil's pursuit had in spurring him on to yet more furious religious zeal.

Robert Schumann began his musical life as a pianist. As the result of an injury to his right hand, he was forced to give up concert work and devoted his life to composing the works which his wife Clara made famous in the concert halls of Europe.

Beethoven was deaf. In the latter part of his life, at a time when he was composing some of his greatest symphonies (the 5th and 9th), his hearing was becoming gradually compromised. It is not difficult to envision a composer, stimulated to even higher peaks of musical greatness by the realization that his hearing was slowly being lost.

John Milton, the poet, became totally blind at the age of forty-four. Although his fame was well established by this time through what have been characterized as his minor poems, and by his duties in the Cromwellian protectorate, nevertheless it was in the post-blindness period that he produced what many think are his greatest works, *Paradise Lost*, *Samson Agonistes* and many others.

Lord Byron had a paralyzed right leg and foot of which he is said to have been excessively embarrassed. He was short and tended to be overweight; nevertheless, he became an extremely active man and famous poet with a more than average amount of aggressiveness in his many fields of pursuit. His hero type embodied the romantic and knightly characteristics which he seemed to long for himself.

Frederic Chopin had pulmonary tuberculosis. In the last ten years of his life he gradually became sicker with this disease. In 1839, he moved to Majorca for his health. Here for ten years he composed his greatest music, including the *Fantasia in F Minor*. We can only speculate on the effect this disease, which was so commonly fatal at the time, may have had in producing his finest music. Others may point to the fact that a well known lady also followed him to Majorca and was with him most of the remainder of his life.

Jeanne D'Arc was a medical enigma. Scant information comes down to us, but we are told that, at her trial, her physical makeup was discussed as it pertained to her possible immortality. She never menstruated and was alleged to have had a "boyish form." It was when she was 13-14 years of age that she first heard Voices from above. It has been suggested that her Voices first began as a form of vicarious menstruation at a time when she first realized that she was not to be as other women. Is it not conceivable that, in her distress over this problem, as time went by she turned to religious zeal and to the Voices that carried her first to honor for France, and then to the stake?

Henri de Toulouse-Lautrec, the modern French painter, as a boy broke both femora. Unable to live a normal life as a result of this crippling and apparently dwarfing injury, he turned to painting and the painter's life. Cabaret society accepted him on his own terms without regard for his physical frailty.

In our own time, there are countless similar examples of the effect of human frailty on the endeavors of man. Theodore Roosevelt was extremely frail as a child, and as a boy, never went to school because of physical weakness. With the help of tutors and his own compulsion, he fought this weakness as a boy and young man, and eventually became the dynamic, aggressive Rough Rider known to us as the 26th President of the U. S. A.

This series is poorly controlled. Surely other factors, other stresses and strains can favorably stimulate man: who can refute the argument that the presence of George Sand on Majorca was the source of stimulation for Chopin? What reason have we to believe that Caesar was more or less dynamic because of his epilepsy? These frailties may in fact produce very different manifestations in different people: one may try to overcome the deficiency itself (Demosthenes); another's response may occur without any conscious acceptance of personal deficiency (Luther); and possibly for the largest group, the attainment is compensation for rather than solution of a deficiency. These questions cannot be answered; yet it is time well spent to pause and contemplate the frailties of man.

J.R.B.

DAWN HONEY

As tortured Dawn with all its light
Carries Dark out in its cold arms
Yellow bees undream themselves
And hum over foggy farms.

THE ONES WHO WERE

They were talking about the ones that were
But made no mention of those who were not;
They were speaking of the ones who were
And giving to the others not a thought.

The ones who were, they said, were so and so
And this and that and one thing and the other;
Father was so at times and also mother,
Sister could also be and also brother,
And one could be as easily as another,
And some of them might come and some might go,

But nothing was said about the ones who were
Not (what difference in that tiny word!),
Not once in the evening was it heard.

They only talked about the ones who were.

For permission to use these poems
thanks are due to Mrs. Merrill Moore.

SILENCE AND LEAVE-TAKING

Silence and leave-taking are together
Part of a moment we can understand
Better not having known it; the still pause
Before a bird relinquishes the sharp claws
Flying away from a branch; the dignity
With which the dull lid closes the dull eye
After death; the moment of hushed weather
Before the thunder scourge and frightened heather
On a heath beginning a violent storm;

The majesty that waits upon the worm;
The silence where the ocean leaves the land
On tideless shores; the hand clasp you give me
Wordlessly this day you go to gather
Fruits of fame beneath Yggdrasill's tree.

I WAS MISTAKEN

"Euclid alone has looked on beauty" —?

Really

That is surprising, I thought once that I
Of an April morning saw Beauty slowly die
As the dew was sucked up to the sun from between two hilly
Slopes enamelled with daisies and month-old leaves, —

Euclid was dust then, dust some thousand years
Irrevocably scattered, past recall by hands or tears,
Scattered and shut in waves and in barley sheaves.

Perhaps I was mistaken, I who see
Mortals wandering about like goldfish in bowls,
Tremendously torn by the elements, lips and jowls
Quivering with each step, who seem to be
The forgotten children of an unnamable band
Baffled and lost in wide, flat desolate sand.

Harvard Medical Alumni Bulletin

It was a life overflowing with poetic sympathy whether in or out of form. His professional treatments seemed on the principle of poetry toward all. He may have written too many of what it amused him to call sonnets. And then again he may not. Louis Untermeyer was saying the other day he may prevail by sheer force of numbers; and numbers is after all the old-fashioned name for poetry. It can't be expected that the hundred thousand pieces he tossed off and never looked back at will be taken without discrimination. Louis Untermeyer made a beginning on the formidable task. Already he and such admirers as John Crowe Ransome, Dudley Fitts, William Carlos Williams, and Theodore Morrison have penetrated to seeing the trees in the woods. He was one of John Ransome's remarkable children at Vanderbilt University.

Serious physician and serious artist, he had no notion of being taken lightly; still there was something of the rogue there that was a part of his great charm. He seldom more than cracked a smile. The first time he ever called me in on a case, and in fact the first time I ever met him, was thirty years ago after a big party at the St. Botolph Club. He had hardly asked if like a country swain he might see me home before he asked if he might use me for a visit at that hour of night at the house of a lady patient. It would do her a world of good to talk literary with me in particular at that hour of night. Anything once, I said. He briefed me: she was a case of wanting to try one more doctor to see if she couldn't be cured of not knowing how to write. It sounded hopeless. Wouldn't he just have to tell that girl to be good? As a last resort he might. I think he would rather tell her to be brave than good. Besides poetry he dispensed courage. Like the boys that go aloft to crash the sound barrier he was a rebuke to the stupid give-it-ups who are willing to have it that heroism is out of date.

On a visit to Sanibel Island he had the bright idea of shovelling up from the beach with his own hands a ton or two of sea shells and shipping them North for his patients to sort out. I wish you could hear the disc recording of his speech about the therapeutic value of this exercise in beauty. Possibly he thought it would do us the same kind of good to sort out the poems he left. Anyway I know he wouldn't mind my saying so.

No praise would mean anything to him that forgot he was a poet. Poetry was his rapture. He could hardly say it without singing it. I remember an evening out for a ride with him weaving through the traffic when he recited all of "L'Allegro" and "Il Penseroso," and to round them off with almost the same gentle sweetness and delight, "The Ballad of the Revenge." On

Merrill Moore

1903-1957



Arthur Griffin

another evening he sang me somebody's setting of Omar. On another still in a cabaret he sang me and everybody present a long, long ballad of the World War (something he had picked up as Colonel in our Army in China) to the ukulele accompaniment of a handsome Italian South Sea islander from South Boston. The South Sea islander might have sung it himself but for the laws of Petrillo. Merrill carried it off like a troubadour.

I looked for him once at Squantum. He was out swimming in the ocean somewhere between here and Europe. I might have to wait for him an hour or so. He was a great swimmer. He struck out boldly the same in the water as in poetry. As I have said he dispensed courage as well as poetry. He had courage to spare—enough to go round. He was a soldier poet, a true Tyrtæus.

Robert Frost



Approaching Juneau on the inside route to Skagway, Alaska. John G. Downing, '15, (Leica).



Florence, World War II. Edward F.

Elderly Taiwanese at Outdoor Opera, Taipei, Taiwan, 1954. Keith Merrill, Jr., '44 (Hasselblad).

Lobsterman. George L. Nardi, M.D., (Contax).



Egret in London Zoo. Franc D.

Jet Trials over Stowe, Vermont Hills. F.





M.D., (Leica).



"Topsiders." John R. Brooks, '43B, (Minox).



ham, '25, (Minox).

D. Ingraham, '25, (Minox).

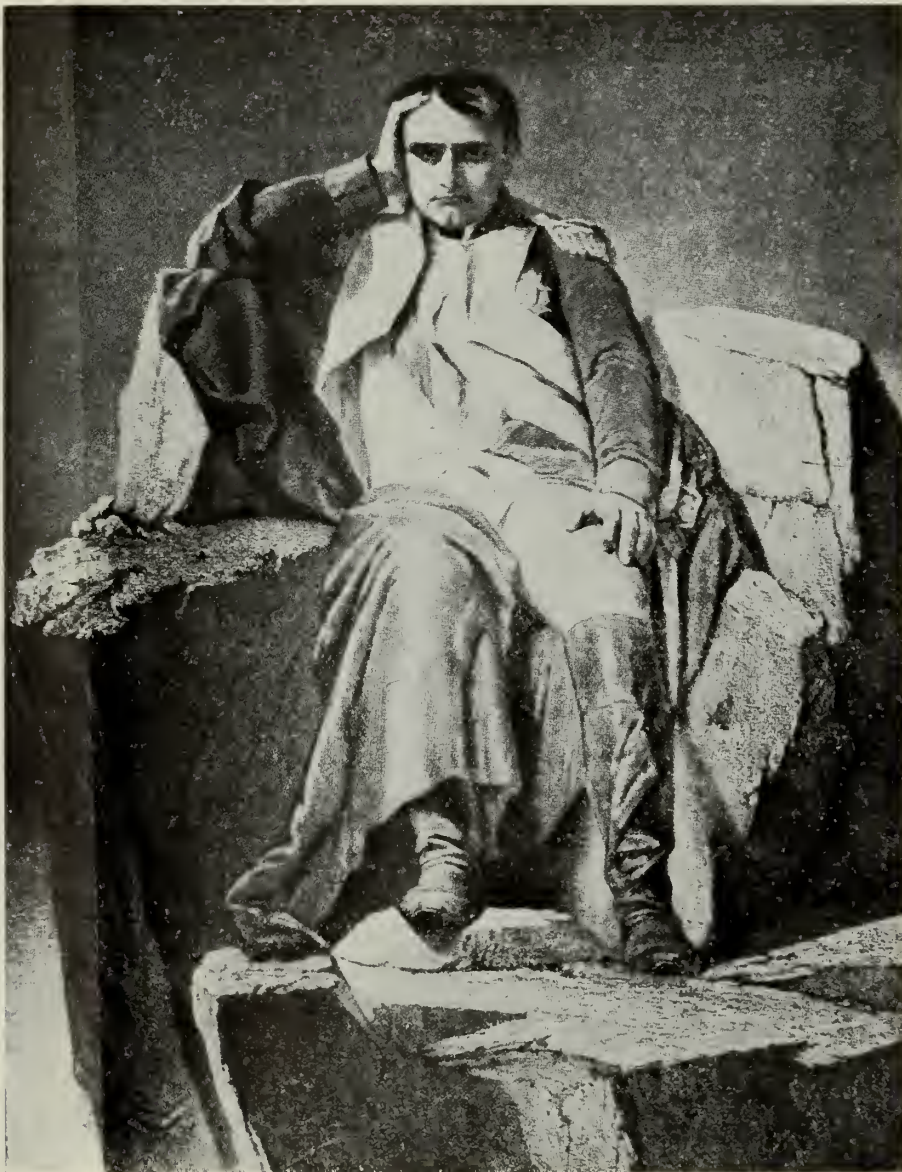


Taiwan Oboe Players, Chinese New Year Lantern Festival. Keith Merrill, Jr., '44, (Hasselblad).



Napoleon's Final Illness and Post Mortem

Robert M. Goldwyn, '56



Napoleon at St. Helena. By Delacroix.

By British decree, Napoleon was deported to the English island of St. Helena and, at age 49, arrived there October 1815, four months after the Battle of Waterloo. The British government felt that "at such a distance and in such a place all intrigue would be impossible; and that being withdrawn so far from the European world, Napoleon would very soon be forgotten." Twelve hundred miles off the African coast, on this ten-by-ten-mile volcanic glob of land which Napoleon bitterly called "My Rock," he lived his last days under careful British surveillance. A series of nondescript buildings, called Longwood, housed Napoleon's party. There were fifty-one persons, including a physician, officers, servants and devoted remnants of his court. The British treated Napoleon as someone with the combined status of a defeated general and a deposed monarch. They were determined that he should not escape from St. Helena as he had from Elba. Napoleon had previously said, "Exile me there! It would have been better to sign my death warrant at once. It is impossible that a man of my temperament and my habits should have long to live in such a climate." His prophecy proved correct.

Concerning the state of Napoleon's health prior to his exile, historians disagree. Chaplin concluded that "the medical history of the Emperor antecedent to his deportation to St. Helena was remarkably free from any indication of . . . grave disease. Not a day had been lost on account of illness, and the stomachic and other ailments from which he suffered had always subsided without special treatment." Sokoloff, however, felt that Napoleon was never robust and was bothered by intermittent fever (possibly brucellosis or malaria), great susceptibility to colds, a scabby skin infection, insomnia, rheumatism, episodic jaundice, constipation, renal colic, nocturia, dysuria, a persistent cough, and attacks of lethargy, often accompanied by vomiting and stupor, which some er-

roneously have called epileptic fits. We do know that Napoleon was very myopic and had difficulty in distinguishing blues from greens. He had an habitually slow pulse that ranged between 50 and 60 beats a minute. Whatever the state of Napoleon's health, it certainly did not deter him from living with extraordinary vigor and efficiency.

Chaplin conveniently divides his account of Napoleon's health at St. Helena into three periods: the first, October 1815 to July 1818 when O'Meara was his physician; the second, from July 1818 to September 1819 when Napoleon was seen medically only five times; the third and last period, September 1819 to May 1821, comprises Antommarchi's attendance with Arnott as consultant in the final month of treatment.

Napoleon landed on St. Helena accompanied by Edward O'Meara (1782-1836), surgeon of the vessel "Bellerophon." During O'Meara's stay, Napoleon suffered from gingivitis, caries, ankle edema, headaches, and bronchitis. He was an obstinate patient, justifiably, considering some of the then popular modes of therapy. Monthalon wrote, "You have no idea what a bad patient he is; he is worse than an infant two years old—one can do nothing with him." Napoleon once said, "Doctor, our body is a machine for living . . . give it a chance to live as intended . . . It will be much more successful in this if you do not paralyze it with drugs. . . . It is quite inexplicable—this aversion I have toward drugs. . . I have stared death in the eyes without any emotion. Yet, I cannot force myself to bring the most innocuous medicinal preparation to my lips." He often remarked that physicians killed as many men as did generals. He especially admired, however, the action and spirit of surgeons. "There at least you work by the light of day."

On September 30, 1817, two years after Napoleon's arrival at St. Helena, O'Meara noted that his patient was complaining of dull, right upper quadrant and right scapular pain.



"The 'Little Emperor' was not so little—5 feet, 6 22/45 inches." The inscription of this 1798 lithograph reads: *Buonaparte Premier Consul de la République française, dans Son Grand Costume.*

O'Meara diagnosed hepatitis and prescribed calomel, anti-scorbutics, and sea-water baths. Napoleon's health soon began to deteriorate. He had complaints of dyspnea, palpitations, weakness, with occasional vomiting. Because of disagreement with his superiors—especially Sir Hudson Lowe, Governor of St. Helena—O'Meara was removed. The position of physician to Napoleon was delicate. The British authorities were determined that Napoleon have good health—at least officially. They knew that if the French heard of their Emperor's failing health, they would demand his return to the "more salubrious climate of the mainland." After O'Meara's departure, Napoleon refused every physician Lowe provided.

On January 17, 1817, Napoleon had a severe bout of vertigo, headache, and right upper quadrant pain. John Stockoe, the ship surgeon of the "Conqueror," was called and visited Napoleon five times. He recommended a slight blood-letting and a purgative—Cheltenham salt (NaCl , Na_2SO_4 , Mg SO_4). He diagnosed advanced liver obstruction and stated officially that Napoleon was seriously ill. Stockoe was thereupon court-martialed! He had bro-

ken the regulation which forbade any British doctor to treat Napoleon while indulging in non-medical remarks with his patient. He was charged with other trivia and, as Chaplin concludes, "He had committed an unpardonable fault of thinking his patient really ill and . . . had diagnosed the case as hepatitis."

Because of Napoleon's ill health, another doctor was sought. Cardinal Fesch in Rome was picked as an arbiter. The Papal policy decreed that "no Frenchman should be sent to St. Helena, nor any man of spirit and ability. Napoleon has to be isolated to the utmost extent." The cardinal chose a young Corsican, Francesco Antommarchi (1789-1838). He was

a dissector who had studied with Mascagni, the well-known Florentine anatomist. Napoleon did not respect Antommarchi. "Sir, you are an ignoramus and I'm an even greater one for submitting myself to your care."

Antommarchi published in 1823 *The Last Moments of Napoleon*. It is a detailed daily medical report of the Emperor's health. Unfortunately, history has shown Antommarchi not to be the quintessence of honesty. His account, however, is the best extant and agrees fairly well with other reports. Napoleon's last illness had the following symptoms: persistent right upper quadrant pain, dull and lancing, with radiation to the right scapular region and the right chest; nausea, vomiting,

abdominal distension, constipation alternating with diarrhea; marked fatigue, anorexia; and cold extremities. The abdominal signs and symptoms became more marked; yet Antommarchi held fast to his diagnosis of chronic hepatitis. Two months before Napoleon's death Antommarchi wrote in a letter, "I declare to you . . . to the whole world that the disease under which the Emperor is laboring is an effect of the nature of the climate, and that the symptoms it exhibits are of the most serious kind. Art is unavailing against the continued action of the air we breathe; and if the English government does not hasten to remove Napoleon from this devouring atmosphere . . . his Majesty will soon be no more. The English newspapers constantly repeat that the Emperor's health is good; but do not believe them. . ."

Two weeks before his death, Napoleon spoke to Antommarchi: "After my death which cannot be far off, I wish you to open my body. . . . I recommend you, above all, carefully to examine my stomach. . . . The vomitings which succeed each other without intermission lead me to suppose that the stomach is the one of my organs which is most deranged, and I am inclined to believe that it is affected with the disease which conducted my father to the grave—I mean cancer in the lower stomach. . . . I charge you to neglect nothing in such an examination in order that when you see my son you may communicate the result of your observations to him and point out the most suitable remedies. . ."

Napoleon's condition became more serious and Antommarchi consulted the English surgeon, Archibald Arnott, senior medical man on "The Rock." Arnott's careful daily reports record the course of his rapidly deteriorating patient. Yet three weeks before Napoleon's death, Arnott stated that his disease was merely "hypochondriasis" and that "if a seventy-four gun frigate appeared in the bay to set him at liberty, Napoleon would be up on his



Bonaparte, Lieutenant d'Artillerie, at twenty-two years of age. Painted by Jean Baptiste Greuze in 1791, when Napoleon was stationed in Valence, this is reputed to be the earliest portrait of Napoleon in existence.

legs directly." In minimizing Napoleon's illness, Arnott was probably not simply stupid; more likely he was aping the British "party-line" dedicated to the principle of a healthy Napoleon. But their Great Hypochondriac now had increased abdominal distension and vomiting. Antommarchi described the final moments: "... Swelling and tension of the abdomen . . . coldness of the extremities . . . pulse extremely weak and intermittent . . . deep sighs . . . piteous moans. I placed a blister on the chest, and one on each thigh; applied two large sinopisms on the soles of the feet, and fomentations on the abdomen. . . Napoleon was about to breathe his last . . . he was no more . . . Such is the end of all human glory . . . Before we could recover from the kind of stupor produced by the first shock of our grief, two Englishmen taking advantage of the opportunity . . . slipped in among us . . . touched the body of the Emperor, and withdrew as they had come. This act of profanation restored us to our senses; we returned . . . where the corpse lay . . . it was not to be polluted by English hands."

The dissector Antommarchi performed the autopsy on May 6, 1821, in the presence of seven English physicians, including Shortt, Arnott, and Henry, and several British and French officials.

The French camp eagerly hoped that the post mortem would show chronic hepatitis presumably caused by the "poor climate of St. Helena." Forced to acknowledge Napoleon's death, the English obviously had to abandon their notion of hypochondriasis and now hoped to find a disease sufficient to have killed Napoleon whether he had been confined to desolate St. Helena or to his luxurious Elysée Palace. Three accounts of the post mortem exist: the official report by the English surgeons; a semi-official account by Henry, and one by Antommarchi. As one might expect, their essential point of disagreement was the state of the liver. Antommarchi main-



Napoleon on Board the "Northumberland." Engraved by Steele, after Orchardson.

tained that the liver was "enlarged," and in his report published four years later, he said that it showed chronic hepatitis. From the accounts of the other six physicians present, historians generally conclude that the liver did not show any marked abnormality and that Antommarchi tried to save face and win French support by emphasizing the possibility of hepatitis. The primary disease lay elsewhere. "Upon opening the abdomen, the omentum was found remarkably fat, and on exposing the stomach, that viscus was found the seat of extensive disease; strong adhesions connected the whole superior surface, particularly about the pyloric extremity, to the concave surface of the left lobe of the liver; and on separating these, an ulcer which penetrated the coats of the stomach was discovered one inch from the pylorus, sufficient to allow the passage of the little finger. The internal surface of the stomach to nearly its whole extent was a mass of cancerous disease, or scirrhus portions advancing to cancer; this was particularly noticed near the pylorus. . . The stomach was found nearly filled with a large quantity of fluid resembling coffee grounds. . ." In addition, Napoleon had a small left pleural adhesion, three ounces of fluid in the left pleural cavity; eight,

in the right; and tubercles with cavities in the left superior lobe. (Napoleon's son, incidentally, died at age 21 of tuberculosis and not gastric cancer as Napoleon had feared). Accounting for Napoleon's many urinary complaints were bladder calculi and gravel. The brain was not dissected and the remaining organs, including the gall bladder, were essentially normal. The autopsy was significant for another reason: it gave an official measurement of Napoleon's height. The Little Emperor was not so little—5'6 22/45".

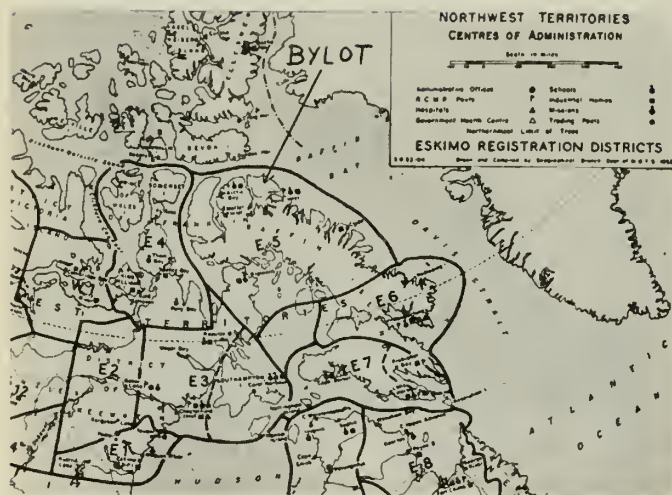
In summary, Napoleon died of gastric cancer associated with a chronic ulcer. The only person who correctly diagnosed the case was Napoleon himself.

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ARCTIC INTERLUDE

Benjamin G. Ferris, Jr., '43B



Map of Canadian Northwest Territories, showing position of Bylot Island. Hudson Bay is in lower left foreground.

In the summer of 1954 I was fortunate to be included in an expedition sponsored by the Arctic Institute of North America and the New York Zoological Society. The area selected for study was east of the North Magnetic Pole, an island called Bylot (see map). The purpose of the expedition was scientific. Dr. Jocelyn VanTyne, former curator of ornithology at the University of Michigan came with the object of collecting specimens of local birds. Dr. William H. Drury, Jr., leader of the expedition came to obtain records of nesting habits of the birds (particularly the length of time required for hatching and how many of the eggs actually did hatch), to collect samples of the local flora, and to study the effect of frost action on the soil. Mrs. Drury and Mr. and Mrs. Axel Rosine helped in the collection of the nesting information as well as in locating nesting sites. Ned Ames, a student of Drury's at Harvard, came as his botanical assistant and spade wielder. His strong mountaineering interests coincided with mine. Dr. Richard Miller came as general ecologist to study the mammals of Bylot Island. I was physician and photographer for the expedition and hoped to be able to study the Eskimos and possibly do a bit of mountain climbing.

Aerial photography had shown that the original concept of an ice cap similar to that on Devon Island to the north was wrong. Bylot is crossed by mountain ranges and it is heavily glaciated in the interior. Some of these glaciers empty into the sea. The icebergs that had calved from the glaciers and are held in the ice are the source of water for the local inhabitants during the cold months.

Late in the afternoon of June 9 our party met at the airport in Ottawa. From Ottawa, a chartered plane was to fly us almost 3,000 miles to Bylot Island. (At our first stopping place, we were greeted with a delightfully medicinal odor: it was the odor of the resin from the ripening poplar leaf buds.) We made a number of stops to deliver cargo at small airports stuck in the wilderness of northern Canada and eventually arrived at Churchill on Hudson Bay on the afternoon of June 10. Here we were to pick up our own gear and food supplies previously sent ahead by rail. On the morning of June 11, we boarded the plane and left Churchill, viewing our last tree until our return some six weeks later along the Labrador coast. Our flight was across ice-filled Hudson Bay. We arrived at Southampton Island about noon. The snow was abundant though it was early June. From Southampton we continued northerly and soon were beyond the arctic circle. Then past Fury and Hecla straits which recalled to us the ill-fated Franklin Expedition, the resulting search parties, and the other attempts to find a Northwest Passage. We crossed the northwestern end of Baffin Island and arrived at Pond Inlet on Bylot, late in the afternoon of June 11.

Pond Inlet had a Royal Canadian Mounted Police Post, a Hudson Bay Company trading post, two mission churches and a variable number of Eskimos, depending on the season and local attractions. Since we were a local attraction, there had been a considerable influx of Eskimos. They came to greet us as the plane landed with wheels on the sea ice. Here we first saw the long sleds they use. The extreme length (14-16 feet) is needed in order to bridge open areas in the sea ice as it breaks up. The dogs are connected to the sleds in a fan-shaped harness, rather than in a straight line as is done in areas further south where there are trees to complicate travel and a greater depth of snow.

The next day was overcast and spitting snow as we loaded our supplies onto the sleds which were to take us on the sea ice across Eclipse Sound to our camp site near the Aktinek River on the south side of Bylot Island. This was our first experience with sled travel. The large sleds are not rigidly held together: the cross-pieces are lashed to the runners with tough seal thongs which permit the sleds to give with the rough ice rather than be pounded to pieces. As we travelled over the ice in a rather irregular fashion the advantages and

disadvantages of the fan hitch became apparent. The dogs leaped back and forth across the traces, snarling them. When one dog failed to pull, his trace went slack and the Eskimo driver would flick him with his twenty-foot whip. One advantage of the fan trace was that two hours of travel sufficed to produce a considerable harness snarl, so that a respite had to be called. Out came the primus stoves and tea was brewed for all. The harnesses were untangled and, after a few Eskimo games such as "snap the glove" and popping the whips, off we dashed again.

We reached our base in the early morning and promptly set up camp. The Eskimos stood by and undoubtedly made many rude remarks about our crazy tents and gear. The camp area was one used occasionally by the Eskimos. It stood on a slight ridge which actually was an old beach. It was well windswept, as we learned during our stay. Eskimos choose such spots rather than lee areas because the snow will not drift in. Their winter igloos and summer tents are built to withstand the winds.

About midnight, still daylight, the Eskimos left us with many shouts and halos to return to their families. This irregular pattern of activity seemed to be quite consistent. It was not uncommon to see individuals in the Pond Inlet area at almost any time of day or night. In fact, the most popular trading time was 1-3 A.M. Since there were 24 hours of sunlight at this time of year, they worked until tired (perhaps exhausted is a better word) and then slept until refreshed. I presume that during the period of darkness a similar situation exists; I was told, however, that prolonged outdoor activity is possible during the winter at the time of full moon and that long trips are made then.

While in camp, we did try to maintain some sort of schedule with meals at regular hours and went to bed at least by midnight. On the other hand, when we travelled with the Eskimos or were with them, we accepted their scheduling. This often required 24-30 hours of steady activity, but it had the compensation that there were usually equally long periods of lying about in camp, eating, talking, and playing "cats' cradle." The Eskimos have many designs which they make with string. One, I recall, was called man-in-a-kyak which was quite realistic. These periods also permitted the ornithological groups to question the Eskimos about the prevalence of various birds. The Eskimos, as one might suspect, are keen and precise observers. They could identify birds from pictures and could distinguish different species and recognize slight differences in plumage. They knew the calls and habits of the birds and, all-in-all, were of tremendous help.

We had an Eskimo and his family attached to us as guide, companion, and source of information. His name was Idlout, and he was a most able and extraordinary person. In some ways, he was the local "head man." He had built a wooden house near the Hudson Bay

Company post, but his real base of operations was a hunting camp on the south side of Eclipse Sound. From here, he ran a line of some 200 traps, with which he trapped arctic fox which are much in demand since their white skins are easily dyed to "match." Ermine are also trapped, but not extensively. With the help of a Hudson Bay Company trader, Idlout was also trying to develop local industries, such as the manufacture of sealskin clothing and sealskin rugs for export.

Idlout was a tireless, patient, and delightful character. He was full of jokes and tricks. On our long sled rides, he was the first to recognize our boredom and quickly devised some prank or game to lend spirit to the tedious sledding. In camp the game was to see how many clothespins could be attached to the other fellow's parka before he knew they were there. Idlout's children were extremely adept at this. I once left their tent with two clothespins attached, as well as a small rock tied to a belt loop by string. This caused much laughter all around.

The Eskimo tent was neat, but instead of sweeping it out, housekeeping consisted of shoveling out the beach pebbles with which the floor was covered and then bringing in a new lot. Idlout's equipment was always in good condition, and the dogteam was fed regularly and appeared much healthier than the average Eskimo team. The dogs were usually fed two seals a week for a team of eight to ten dogs. Feeding time was exciting; the dogs knew what was coming and were tense and eager. While one Eskimo cut up the seal-skin, bones, viscera, and all—into bite-size pieces, another

Eskimo girls in native costume.



stood guard with a whip to keep the dogs at a distance. Despite the whip the circle of dogs kept moving closer and closer as the cutting-up was completed and, when the signal to eat was given, the two Eskimos had to leap nimbly over the surging dogs or be engulfed. The small pieces insured that weaker dogs would get something. It took only a few minutes for the dogs to eat every scrap. There was much snarling and noise of eating. Frequently brief fights resulted but usually one dog would lie down and howl penitently and the victor would stalk away, very stiff and bristling with superiority.

During the first part of our stay the ornithologic group marked nesting sites and made regular visits to count the eggs as they were laid. These visits were done daily to determine how many hatched and how long it took. Some of the birds included in this survey were red-throated loon, black-bellied and golden plovers, horned larks, Lapland longspurs, snow buntings, white-rumped and Baird's sandpiper. This was one of the nesting sites of the snow geese, although in our particular area they were scarce. There were also signs suggesting that many snowy owls had been in the region in the past, but this year we saw none. This undoubtedly was related to the scarcity of lemmings, small animals resembling moles, on which the birds feed. There was much evidence of earlier occupation by the lemmings with their mounds and tunnels, but we saw no live ones.

As part of the ornithologic studies a visit was made to the Akpah cliffs. The Eskimo name for the murre, a sea bird, is "akpah," and this name has been given to the cliffs which are nesting sites for large numbers of murres and kittiwakes. The cliffs lie some six miles beyond Button Point, at the southeast corner of Bylot Island. Button Point used to be a rendezvous spot for whaling ships. Here they contacted the Eskimos who came along as their harpooners. Our trip from Button Point to the cliffs was out over the sea ice, and in one spot there was only a narrow shelf on the ice, frozen to the shore. It was just wide enough for the sleds. Needless to say, we all walked across. Arriving at the cliffs, we had the inevitable cup of tea and watched the birds. The kittiwakes were arguing among themselves for nesting sites. They were all in the lower portion of the cliff. Higher up, the dark colored murres were flying in and out with their whirring, buzzy flight. It was too early for much egg-laying. The Eskimos eat the eggs and the birds, but can get out to the cliffs only when the ice is right. Later in the year, the ice we were on would be gone, and only the sea would beat against the cliffs.

On the trip back from the cliffs, there were many other ocean birds to be seen in the open leads—king eider, common eider, brant, dovekies, glaucous gulls, black-backed gulls, fulmars, old squaws and jaegers. On the way back we also decided to hunt seal. The two sleds were turned out toward the edge of the ice where



Sled travel over sea ice of Eclipse Sound. Water in foreground is on surface of ice; Bylot Island in background.

there was only open sea between us and Greenland. The off-shore breeze kept the small ice-cakes away so there was good hunting. We all wondered what would happen if our portion of the ice broke off! The shot seal had to be retrieved by the boat which we had on the sled. There was much excitement when a walrus broke water nearby. Everyone hoped to get him, but he rose only once more after being first sighted. Seven or eight narwhal were also seen. This region of Eclipse Sound is one of their migration routes. They are hunted for their ivory tusks. The Eskimos eat the skin and blubber, which allegedly tastes like fresh cucumber. We did not have a chance to verify this.

My own interests were in large measure satisfied by being allowed to examine the birth and death certificates at the Pond Inlet Royal Canadian Mounted Police Post. The Northwest Territories of Canada include virtually all the northern portion of Canada and, for administrative purposes, this tremendous area is subdivided. Pond Inlet was the administrative headquarters of a subdivision called the E-5 district—some 145,000 square miles in area (see map). Because police headquarters maintained the birth and death records, it was possible to estimate fairly precisely the present Eskimo population of the area. The population as of June 1954 was 1,009, and was concentrated along the seacoast. Most of the interior was uninhabitable, due to widespread glaciation, but the large bays and extensive tracts of sea near the coast offered favorable hunting. On a bright, sunny day one could climb a hill above Pond Inlet and see 40-50 seals basking in the sun. These are the main food of the Eskimo and his dogs. In addition, the frozen sea permits easy travel over its surface except for about two months of each year—one month when the ice is breaking up, and another when it is forming. These are the only two months when boats are used for travel, instead of sleds. These two factors—transport and food—determine where the population concentrates.

Since the records went back for 20 years with considerable accuracy, it was possible to determine how

much the population had increased. During this period, it had nearly doubled, and this was in considerable contrast to the usually-reported condition of Eskimo population. The increase probably was due to a number of factors and it would be difficult to decide which was the most important; the limited contact with outsiders and their diseases was undoubtedly one favorable factor. This area apparently also had good hunting facilities and a plentiful supply of game. The family allowance plan undoubtedly has helped, but it has been in effect for only eight or ten years. There were families on relief, but it was anticipated that this would decrease when the Canadian old age pension came into effect in 1955. The modern rifle has allowed the Eskimo to kill more game, but this has had both good and bad results: good, because the Eskimo can supply his need for seal and walrus more easily; bad because often wounded seal escape and die later. Also, if a herd of caribou is found the entire herd is usually killed off, as happened to the caribou that were once on Bylot Island. The Eskimo does not have the concept of conservation.

Since we were not there during the winter months when the hunting is undoubtedly more difficult, it is not possible to comment on this. However, we were told that more of the older techniques were used then, such as spearing the seal at the "agloos" or breathing holes. Seal are also netted in the fall and kept frozen for dog food. In a similar way, the arctic char, a form of salmon, is netted and frozen.

The population as a whole tended to be young, and slightly more than 50 per cent of the population was under 15 years. The main cause of death was accidents. Drownings took a large share here. Eight persons had drowned at one time in one recent major accident.

Respiratory diseases made up a large percentage of all causes of death, and food poisoning and dysentery were not uncommon. Starvation also took its toll, but many of these diagnoses must be taken with some reservation since there were no physicians in this area. The nearest physician was at Pangnirtung, almost 1,500 miles away. He was available by radio for consultation, but much of the actual diagnosis and treatment of disease were done by the Royal Canadian Mounted Police personnel and the Hudson Bay Company traders. Once a year, the Hudson Bay Company boat comes to the posts and usually there is a doctor aboard who does what he can during his brief stay.

My personal medical experience with the Eskimos included a puncture wound from a nail in the foot, a baby with colic, and a case of arthritis. As far as I could determine, the nail wound would have healed without me. We had no tetanus antitoxin, but I doubt that tetanus is a real problem in the arctic unless dogs harbor the spores. The baby with colic did well on paregoric; and the man with arthritis, who carved soap-stone, seemed to respond temporarily, at least, to the use of the medicated salve to rub over his hands.

In general they were a healthy, happy group with whom it was a real pleasure to be associated. We could all profit from their philosophic approach to life and their ability to adapt to vigorous and demanding conditions. As the day approached when we were to leave, we all hoped the plane would not come. Because the weather was unsettled we did have an extra night. The next day, however, we all reluctantly boarded the Catalina flying boat and took off from the only area free of ice. Our return flight took us to Frobisher Bay, Fort Chimo, and finally to our train connection at Montreal.

NEW APPOINTMENT

On January 1, Ralph T. Esterquest, Director and Secretary of the Midwest Inter-Library Center and Corporation of Chicago, became Librarian of the Harvard Medical School, School of Dental Medicine and School of Public Health. The Midwest Inter-Library Center in Chicago, which Mr. Esterquest has directed since its opening in 1949, is a cooperative effort by 17 mid-western universities to establish a useable depository for infrequently used books and periodicals and to acquire valuable materials which none of the member universities have in their own collections.

Prior to becoming Director and Secretary of the Midwest Inter-Library Center, he had been Assistant

Librarian at the Institute for Advanced Study at Princeton from 1940 to 1942, and Director of the Pacific Northwest Bibliographic Center in Seattle, Washington, from 1946 to 1947. In 1952, he served as a Ford Foundation Consultant to the Southern California Libraries, and in 1953-54 was a Fulbright Senior Research Fellow in England.

Mr. Esterquest comes to Harvard at a time when the Medical School is mustering its resources to provide a new library which will serve not only the Medical School but be an important addition to the University's vast library system, now the largest university library in the world.



Ralph T. Esterquest



The novice uses an umbilical cord.

A NEW SPORT

R. C. A. Weatherley-White, '58

A new sport will in all probability suffer ridicule unimaginable to the thousands who later enjoy it when it has gained popular acceptance. Does that section of the world population which takes for granted as part and parcel of the normal scheme of winter living the weekly dash to ski slopes from Kitzbühel to Sun Valley, realize the scorn heaped upon the late Sir Arnold Lunn when he tried to persuade the Lowlanders that here was a real sport for those who liked to live "allegro"? Skiing was entirely utilitarian, merely a means of transportation when the snow rendered roads impassable, and the idea of people actually paying money to seek out such inconvenience was inconceivable. So it has been with golf, mountain climbing, and even the TV favourite, basketball.

The most recent sport to fall into this category is competitive parachute jumping, or, to use a word which has found favour with the popular press—"sky-diving." The spectrum of reaction to this activity ranges from incredulity to overt horror, with the analytically-oriented offering some interesting psycho-



Sometimes the wind can throw you off.

dynamic diagnoses. Actually parachute jumping is a much misunderstood sport—and sport it is when the military trappings have been removed.

Perhaps in the old days, there were grounds for alarm. Parachute jumping was a dangerous business, restricted largely to barnstormers at air shows, and the anything-for-kicks type of personality who might otherwise have taken up flagpole-sitting. In addition, technical standards of competence were not high, safety rules were unheard-of, and the net result was a high mortality and a degree of public opprobrium. Then, with the advent of World War II, there arose the need for thousands of trained parachutists. To attract suitable applicants for this branch of warfare, the “hero-myth” was invoked, and an exaggerated concept of the physical qualities essential for parachute training was widely publicized. Paratroopers from different nations lived up to their billing, and proved themselves superior fighters on such battlefields as Arnhem, Bastogne and Crete; but as far as the general public was concerned, the publicity merely promoted the idea that jumping was a legal form of *felo-de-se*.

This, then, is the position of the sport in the U.S.A. today, restricted to a very small group of dedicated die-hard devotees; in fact, there is probably no internationally accepted sport which has fewer adherents in this country than sky-diving. And internationally accepted it is—once again we have to turn to the other side of the Iron Curtain for our criteria: The Soviet Government, perhaps with an eye to the military future, began to promote parachute jumping as a sport for young workers in 1933. Clubs sprang up all over the country, and it seems now as if every park and village square has its own jump towers. There are said to be two million trained civilian parachutists in Russia today, of whom perhaps 20,000 are active proficient sky-divers. Quite a reservoir on which to draw for international competition! In the Western World

February, 1958



This was the first National Intercollegiate Championship Meet, held at Woodbury, Connecticut in May, 1958.

we look to France for leadership. There are ten civilian training centres in that country, of which the most impressive feature is their safety record, due entirely to the very rigid standards of competence and technical proficiency insisted upon. In fact the only two fatalities reported there involved parachutists driving to the airfield on their motor-scooters . . .

We have bandied the term “sky-diving” around very liberally, and it might be well at this point to describe how it differs from the conventional type of parachute jump-

ing as practised by the Armed Services. While the basic fundamentals are the same, the two are as different as figure skating is from ice hockey, as Heifetz playing Beethoven’s Violin Concerto is from a fiddler on “Grand Old Opry”! The exigencies of warfare demand that a large body of troops be, with a minimum of training, dropped on approximately the same place at approximately the same time—the parachute is a means to an end, a mere alternative method of transportation. Consequently you are packed like sardines into a noisy, uncomfortable plane, with a half-



The author's concept of accuracy

Ernest Hill

fitting parachute and the uncomfortable feeling that you are not quite sure what you would do if anything went wrong! When the signal is given to jump, the mad rush to the open door leaves you no time to think and, pushed by the man behind you, you topple into space with your wits confused. Your parachute opens automatically, and having jumped from a low altitude (necessary in the military situation to prevent the wind scattering the potential combatants all over the countryside), you hit the ground almost before you are aware of having left the plane.

In contrast, sky-diving is an intensely individual experience. For one thing, you will probably jump alone, with just your pilot for company. Bereft of the solace of colleagues who are as frightened as oneself, one is thrown on one's own resources. You alone guide the pilot, you alone decide when to jump in order to hit your target, and there is all the time of the ascent and run to think about what you are going to do in the next minute or so—ample opportunity for introspection!

But most important is the fact that the parachute does not open automatically, but has to be activated by pulling the rip cord. This at once

introduces new parameters. By arching one's back and spreading one's arms and legs in a "swan-dive" position, one can remain stable and entirely controlled while falling at a terminal velocity of 130 mph. Consequently, a delayed drop can be achieved without the uncontrolled spin leading to syncope which causes so many fatalities among untrained pilots who have to "hit the silk." Furthermore, it is possible, while falling in this stable position, to vary minutely the position of one's hands and thus to perform manoeuvres such as 360° turns and figure eights before opening the parachute. This, then, is the essence of sky-diving—to have command of the plane, to leave it of one's own volition, and while falling for perhaps 30 seconds to perform graceful swoops and banks which yield the same aesthetic satisfaction as executing an immaculate high dive or Christiana.

One might ask: "Where does the competition come in—who hits the ground first?" Repressing a shudder, the answer is that competition is judged on two bases—the accuracy with which one lands on a target, and the form with which one performs pre-ordained manoeuvres before opening the parachute. On these terms, the very amateur U. S. team

finished a creditable sixth in the past World Championships, being beaten only by state-supported Communist teams, and their mentors the French.

The sport is now beginning to intrigue American universities, and herein lies the relevance of this article to this particular publication. The Cambridge Parachute Club composed of members of Harvard College and various graduate schools including the Medical School, was formed in March 1957, and was the first of its kind in the country. Now a going concern with their own equipment, plane and airfield, they have trained over 15 novices, have recorded over 100 jumps, and have won the first National Intercollegiate Team Championships. There is even a young lady who out-drops some of the men!

So this is the sport parachuting situation today. While not suggesting that it will outstrip baseball in national popularity, there is a good chance that under careful supervision it will at least lose the stigma of danger which it has unjustly gained. After all, in France it has been proved to be less than one-tenth as dangerous as skiing ($p=0.05$).

Unless otherwise indicated, photographs accompanying this article were taken for Sports Illustrated by Coles Phinizy.



Harvard Medical Alumni Bulletin

HONORS

The first award of Cancer Care, Inc., of the National Cancer Foundation, was presented to SIDNEY FARBER, '27, Professor of Pathology, at The Children's Hospital, Harvard Medical School, on November 13, 1957, in recognition of his contributions through research and care to patients with advanced cancer, and to their families. He was cited particularly for his inauguration 10 years ago of a program of total care of the patient with advanced cancer, while pioneering in a vigorous basic and applied research program concerned with the control and cure of cancer.

* * *

On November 15, 1957, at a ceremony held in the Brazilian Embassy in Washington, GEORGE CHEEVER SHATTUCK, '05, was decorated with Brazil's Order of the Southern Cross in the grade of officer. The decoration was conferred by the Brazilian Ambassador, and was for medical studies which Dr. Shattuck carried out in the Amazon Basin as a member of the Hamilton Rice Seventh Expedition to the Amazon in 1924 and 1925, and for many years of work as a board member of the Pan American Society of New England to improve inter-American relations. Dr. Shattuck recalled recently the hazards of tropical living at the time of the Expedition, when far less was known about antibiotics, and there was no vaccine for protection against yellow fever as yet.

* * *

The first Arvo Ylppö Medal, honoring the founder of the modern practice of pediatrics in Finland, was awarded in Helsinki on October 26

to Dr. CLEMENT A. SMITH, Associate Professor of Pediatrics at the Boston Lying-In Hospital, The Children's Hospital and Harvard Medical School. Dr. Smith was selected to receive the gold medal of the first award for his basic research in the care of premature infants. His major contributions in the field of pediatrics have been in the physiology of the newborn. His research investigations have involved problems of anesthesia, nutrition of mothers and infants, resuscitation following birth, and the water balance of the newborn.

Dr. Ylppö was himself presented with a gold medal at ceremonies at the University of Helsinki. Attending the award-giving ceremonies were the President of the Republic of Finland and leaders of the Finnish Government along with representatives of the nation's health, cultural and social welfare organizations.

The Arvo Ylppö Medal will henceforth be awarded every fifth year to a Finnish and a foreign scientist simultaneously, for contributions of international importance in research dealing with prematurity. The award has been established by four Finnish organizations: The Mannerheim League for Child Welfare; the Finnish Pediatric Association comprised of physicians specializing in pediatrics; the Foundation for Support of Pediatric Research and the Orion Company, manufacturers of pharmaceuticals.

Dr. Smith is a native of Ann Arbor, Michigan, and received his undergraduate education and medical schooling at the University of Michigan. He has been associated with Harvard Medical School since 1933, with the exception of two years from 1943 to 1945 when he served as Medical Director of the Children's Hos-



Dr. Smith

pital of Michigan in Detroit and as Professor of Pediatrics at the Wayne University College of Medicine.


* * *

LEWIS THOMAS, '37, has been appointed by New York University Professor and Chairman of the Department of Medicine in the College of Medicine and Director of the Third Medical Division of New York City's Bellevue Hospital Center. The appointment will become effective at the close of the 1957-58 academic year. Dr. Thomas has gained a reputation through his research in the field of infectious disease and his early recognition of the danger of the indiscriminate use of cortisone in the treatment of infectious diseases. He has also done notable research in hypersensitivity and allergic reactions.

At the present time, Dr. Thomas is Professor and Chairman of the De-


partment of Pathology, a position he has held since joining the faculty of New York University in 1954. He is also a member of the New York City Board of Health and of the Research Council of the Public Health Research Institute of New York, and a consultant to both the Surgeon General of the U. S. Army and the Surgeon General of the U. S. Public Health Service.

* * *

his scroll is presented to
Merrill Cary Sosman, M.D.

Distinguished physician,
author, teacher and radiologist

The Gold Medalist for the year
Nineteen Hundred and Fifty-seven.


The Radiological Society of North America, Inc.

Chicago, Illinois
November 21, 1957



Citation awarded to Dr. Sosman

At the 43rd annual meeting of the Radiological Society of North America in Chicago in November, MERRILL C. SOSMAN was named Distinguished Physician, Author, Teacher and Radiologist of the Year and was awarded the Society's Gold Medal and Citation. The medal was inscribed with the words, "In recognition of achievement in the science of radiology." Dr. Sosman is an authority on the therapeutic and diagnostic use of the roentgen ray; he has enlarged considerably the scope of radiology, and lent the weight of his knowledge of general medicine, surgery and pathology to teaching and clinical X ray interpretation, with an accompanying wit that is somewhat less than weighty.

REGIONAL ACTIVITIES

PITTSBURGH

During the course of a five-day meeting of the Medical Society of the State of Pennsylvania, a dinner for the Harvard Medical Alumni was held at the Penn-Sheraton Hotel on September 18, 1957, under the direction of William Flannery '35.

The guest speaker was Oliver Cope, '28, Associate Professor of Surgery at Harvard Medical School and Visiting Surgeon at the Massachusetts General Hospital. He also took part in a panel discussion on "Hyperthyroidism" at the State Medical Society's 107th Annual Session on Tuesday, September 17.

DENVER

Hugh A. MacMillan, Jr., '40, acted as chairman of the Rocky Mountain Annual Lecture and Dinner held on October 25, 1957. Maxwell Finland, '26, was Guest of Honor. In the afternoon, Dr. Finland delivered the annual lecture on "Resistance to Anti-biotics with Special Reference to Staphylococcal Infections" before the Rocky Mountain Medical Society. Dr. MacMillan reported:

"Dr. Finland drew an excellent crowd of medical students and the graduate profession at his Medical School lecture on Friday afternoon. We had a nice Alumni dinner afterwards at the University Club.

Officers elected for the coming year are: Robert K. Brown, '37, President; J. Lawrence Campbell, '33, Vice-president; George Wilcox, '46, Secretary, and Yours truly will remain as Treasurer."

PORTLAND

Thomas B. Fitzpatrick, '45, organized a luncheon in honor of Dr. Merrill C. Sosman on October 3, 1957. This constituted the first meeting of the Harvard Medical School Alumni Association of Oregon. This group has only been in existence since February, 1957 and now plans to meet twice a year.

CHICAGO

The oldest Harvard Club in the United States, that of Chicago, celebrated its centennial in 1957. A dinner honoring the occasion was held for Medical Alumni on October 4, 1957. The guest speaker was John Rock, '18, Clinical Professor of Gynecology *Emeritus*. Dr. Philip Shambaugh, '30, Chairman of the Dinner, writes:

"The Dinner proved to be a very pleasant occasion, and was, I should say, a complete success. A total of seventy-one attended—largely doctors—but with a sprinkling of Lay

NEW YORK

Kenneth W. Thompson, '29, was chairman of the fall meeting of the Harvard Medical Society of New York. A dinner at the Harvard Club of New York City was followed by an address given by Colonel D. G. Patterson from the Ballistic Missile Agency in Alabama on the subject, "Push Buttons in Modern Warfare."

Frederick Carpenter Irving

1883-1957

Frederick C. Irving was graduated from Harvard College in 1906 where he had devoted his time to the humanities, rather than to the sciences. This training reflected itself throughout his whole life.

In Medical School he was an honor student. His grand sense of humor and his joy of life were infectious, and his comments on and about the school work were a source of happy diversion to his classmates. To this, he added several satirical jingles, poking fun at his teachers and the methods of instruction. These bits of satire, he continued to compose, the last being his delightful essay, "The Return of Aesculapius," which was printed in the *Medical Alumni Bulletin*.

After graduation, he won a position as Surgical House Pupil in the Massachusetts General Hospital. There, he came under the influence of Drs. Maurice Richardson, Hugh Cabot, Franklin Balch, Hugh Williams, Samuel J. Mixer and George W. W. Brewster. It was under the latter two that he worked as a Senior, and the sound teachings of Dr. Brewster—to whom he was much attached—served as the basis for the brilliant surgical career that followed.

A term in the Boston Lying-In Hospital followed; then a preceptorship under Dr. Franklin Newell, with whom professional and friendly relations continued throughout Dr. Newell's life. Following his residency, Irving became attached to the staff of that hospital where he practiced and taught—from instructor to Richardson Professor of Obstetrics—until his retirement.

At the beginning of World War I, he joined the Massachusetts General Hospital Unit Base Hospital No. 6, under the command of Dr. Frederic A. Washburn, with Dr. Lincoln Davis the chief of Surgery and Dr. Richard Cabot chief of Medicine. With this unit, he served for approximately two years in France and also with the Italian Army in Italy. Much of the time in France he served as Company Commander—and assisted Dr. Washburn in building up a great Boston Hospital in Bordeaux, France.

Army headquarters called for surgical teams—doctors, nurses and corpsmen—for service at the front and Dr. Irving, with Dr. Davis, was sent and immediately assigned to duty on the Italian front with the Italian Army against the Austrians.



Dr. Irving

Bachrach

His stories of the inactivity along the Tagliamento River were masterpieces of satire. During this inactivity, although he had never studied Italian, he, together with Dr. Davis, translated an Italian textbook on surgery of the chest—which surely was no mean undertaking.

Back in America, he resumed his duties and practice at the Boston Lying-In Hospital, during which time he wrote a book, "Safe Deliverance," which was a story of the Boston Lying-In Hospital and its Professor of Obstetrics.

He was a brilliant student, an able administrator and a master teacher. Few who worked under him will forget his precepts. He was proud of his profession.

To this may be added: a humble physician and a loyal friend.

HENRY C. MARBLE, '10

William Hart Hagan

1921-1957

The crash of a Honolulu bound Pan American Stratocruiser, in the Pacific, on November 8, 1957, cost the life of one of the most promising and beloved members of the Class of 1945, William Hart Hagan, and that of his wife, Norma.

In the course of surgical practice with his father in Louisville, Kentucky, Bill at 36 had already in large

measure fulfilled the great promise of his college and medical school careers. He was graduated from Princeton in the class of 1943 with Highest Honors in biology. He was a member of Phi Beta Kappa, the glee club, and debating society. At Harvard Medical School he was an outstanding scholar as well as a leader. He was a member of the Boylston Med-

ical Society and was elected to Alpha Omega Alpha. In his fourth year he was chosen Vice-president of his class. He interned in surgery at Johns Hopkins Hospital, and served his surgical residency at the University of Pennsylvania.

His classmates will remember Bill as a tall, quiet, confident person, full of considerate good humor, imper-

turbable, and generous to a fault. Many were the times he would persuade tense, worried friends that some quiet relaxation prior to an examination was the best last-minute preparation, and then take several of them out to dinner. He had the ability to strengthen his friends' confidence at times when he may have had as much at stake as they. He was intelligent to the point of brilliance. His work and thinking were thoroughly unhurried, and organized. He was a steady, loyal friend who never forgot the associations of the past, and yet had unlimited capacity for new ones.

Bill's wonderful wife, Norma, was quiet, charming, and intelligent. She actively shared many of her husband's charitable interests in the community. They leave one son, William Jr., aged 10.

A tribute to the esteem in which their neighbors held them was a



Courier-Journal and Louisville Times

Dr. and Mrs. Hagan, at a 1953 Princeton Glee Club dinner in Louisville.

gathering of several hundred people in a down-town church for prayer shortly after the news that they had been lost was received:

It is characteristic that Bill and his

father, Doctor H. Hart Hagan, were the first to contribute to the Experimental Laboratory in Surgery, opened in 1953 at the University of Louisville Medical School. To keep alive the ideals of Bill and Norma, and to express in action the grief of the community and friends, a Research Fund has been set up *in memoriam*. The income will be used, "to encourage the creative individual surgeon through the stimulation of his talents." Friends are being encouraged to contribute to this Fund in the hope that a sufficient amount for effective use will accrue. "It is an appropriate memorial to a young couple whose hope and promise for their community were bright."

The sympathies of Bill's classmates at Harvard go out to the families and colleagues of this inspiring young couple. They will live constantly in our hearts.

CARL S. HOAR, JR., '45

Fiftieth Anniversary

The Division of Medical Sciences will celebrate the fiftieth anniversary of its establishment on May 29 and 30, 1958. Dr. Eric G. Ball, Chairman of the Division of Medical Sciences of the Faculty of Arts and Sciences, Harvard University, announced that plans are being made to hold a dinner on the evening of May 29. On May 30 a scientific session will be held in conjunction with the Alumni Day celebrations of the Medical School. At this scientific session graduates of the Division will speak. All graduates of the Division will be invited to attend these functions. The graduates of the Division now total 232; of these, 147 received the Ph.D. degree and 85 the A.M. Graduate students at present working for degrees in the Division total 57.

ALUMNI NOTES

During the year the Medical Alumni Office receives several inquiries from communities in the United States and from the families of deceased physicians concerning the interests of young physicians in setting up or taking over practices. A few of the inquiries concern the specialties; others are in the general practice category. If you are interested in exploring these possibilities please address your inquiries to the Executive Secretary, Harvard Medical Alumni Association, 25 Shattuck St., Boston 15, Mass.

1849

Dean Jewett Locke's granddaughter, Dr. Alma Locke Cooke, who served as a Congregational Christian medical missionary in China for thirty years, sailed on the Belgian Line freighter *Lubilash* for Lobito, Portuguese West Africa. A woman physician who refused to accept retirement at the

age of 70 last summer, she sailed in November to resume a medical missionary career that began in 1920.

She was taken prisoner by the Japanese in World War II and later expelled from Red China. She now hopes to specialize in gynecology, but she feels that a medical missionary must be prepared for anything. She will be paying her own salary.

It will be remembered that Dr. Cooke's grandfather, Dean Jewett Locke, trekked by covered wagon from New Hampshire to California in the 1849 gold rush. The town of Lockeford, near Stockton, where he began his medical practice is named after the pioneering physician.

After completing her missionary studies in 1920, Dr. Cooke applied for a medical missionary post in Angola, Africa. But with no position for a woman physician open, the American Board persuaded her to go to China. From 1920 to 1949, she served American Board hospitals in Lintsing and Tehsien, China. The Lintsing hospital served an area of 5,000,000 persons. It was turned into a base hospital for wounded soldiers in the Japanese invasion. Ministering unto the Chinese wounded, she was taken prisoner by the

